University of Texas Bulletin
No. 2209: March 1, 1922

CONFERENCE UPON
THE TEACHER-PROBLEM IN TEXAS

THE UNIVERSITY OF TEXAS

Friday and Saturday,
April 21 and 22, 1922

"A general diffusion of knowledge being essential to the preservation of the liberties and rights of the people, it shall be the duty of the legislature of the state to establish and make suitable provision for the support and maintenance of an efficient system of public free schools."

—*Article VII, Section 1, Constitution of the State of Texas*

"If the character of qualifications of teachers be allowed to degenerate, the free schools will be pauper schools, the pauper schools will produce pauper souls, and the free press will become a false and licentious press, and ignorant voters will become venal voters, and an oligarchy of profligate and flagitious men will govern the world."

—*Horace Mann*

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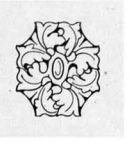
TEACHER-TRAINING IN THE SENIOR COLLEGE

Conference Upon Teacher-Problem
in Texas



UNIVERSITY OF TEXAS
April 21 and 22, 1922

*TEACHER-TRAINING IN THE SENIOR COLLEGE

T. D. BROOKS, PROFESSOR OF EDUCATION, BAYLOR UNIVERSITY

What contribution are the senior colleges of Texas, other than the state institutions, making to a supply of trained teachers for the public elementary and secondary schools of Texas? For what types or lines of teaching service are they seeking especially to provide training? What amount of professional training do their students have on going from the colleges into the schoolroom? Does the demand for their product indicate that they are successful? Do their plans for placement indicate their acceptance of responsibility in this critical matter?

These impress the writer as questions well worthy of study, but the present paper will fall far short of answering them. The lines of inquiry pursued could, at least, produce only grounds for inference, not for conclusions. Returns have not been secured from a part of the colleges. Some colleges replying to the inquiry have not had records on which to base replies to all questions. As is always to be expected, some questions have evidently been misinterpreted.

The objective data sought, as likely to throw light on these questions, were: The number and class of certificates issued in the calendar year of 1920-1921 to students of the several colleges on the basis of college training; the number of students placed in teaching positions of different sorts in the same year; and the number of professional courses offered for specified purposes, with the enrollment in each. Besides these quantitative items, the colleges were asked to indicate the types or levels of teaching for which they sought to give preparation, ranking them in order of importance or emphasis; and to give a description of their plans for placement of teachers.

Inquiries were sent to the following institutions: Abilene Christian College, Austin College, Baylor College for Women, Baylor University, Daniel Baker College, Howard Payne College, Incarnate Word College, Simmons College, Southern Methodist University, Southwestern University, Texas Christian University, Texas Presbyterian College for Women, Texas Woman's College, Trinity University, and University of Dallas.

The institution last named replied that it offered no specific courses for teacher-training. No replies were received from Austin College or from Daniel Baker College although a second request was sent.

Taking up the questions suggested above, let us see what light the returns throw on them.

1. How many teachers are the senior colleges of Texas, other than state institutions, training for the public schools of the state?

*This paper contains one of the studies made for the Conference upon the Teacher-Problem in Texas, held at The University of Texas April 21 and 22, 1922.

The total number of state teacher's certificates granted in 1920-1921 by the eight colleges reporting on this item was 646. For these eight schools, the figure 646 probably represents the output of teachers with professional courses to their credit for the year more accurately than any other data available.

2. To what extent can this output be considered "trained" teachers?

The following table gives, at least, a partial answer:

TABLE I

CERTIFICATES OF THE SEVERAL CLASSES GRANTED IN 1920-1921 ON THE BASIS OF WORK DONE IN SENIOR COLLEGES

College	First	Elementary			High School					
	Tem.	Per.	4yr.	6yr.	Per.	2yr.	4yr.	6yr.	Per.	K'g.	T't'l
Abilene Christian	28	0	16	0	0	5	1	0	4	0	54
Baylor College	85	3	46	0	0	13	3	0	0	2	152
Baylor University	140	12	0	0	0	0	0	0	0	0	152
Incarnate Word College	5	0	30	35	0	8	0	0	0	0	78
Southwestern University	0	0	0	0	0	0	0	0	0	0	63
Texas Christian College	0	0	49	0	0	1	1	0	13	0	64
Texas Presbyterian College	8	2	0	0	0	0	0	0	0	0	10
Texas Woman's College[1]	0	0	0	0	0	30	30	0	13	0	73
Total	266	17	141	35	0	57	35	0	30	2	646

The record of certification throws some light on this. Four hundred and sixty-four of these 581 teachers (excluding the two kindergarteners) received certificates to which a single course, or 108 hours, of professional training would make them eligible. But for one fact, the conclusion would be that this 80 per cent of the teaching output of the senior colleges has this limit of professional training. The fact is that temporary certificates are sometimes secured a second time on additional college work including additional courses in education. The writer has no means of estimating the number of such cases.

As to the extent of academic training, the data in hand give absolutely no indication, since these temporary certificates are very frequently secured by upper-class and graduate students.

To pursue the analysis of the figures, 70, or 12 per cent, secured certificates to which two courses, or 216 recitation hours of education would entitle them; while 47, or about 8 per cent, had the four courses which made them eligible to permanent certificates.

3. For what types or levels of teaching service are these colleges seeking to provide training? Reference should here be made to the left hand portion of Table III.

Eleven schools reply to this question. High-school teaching is given first emphasis in four, is given equal emphasis with elementary grade teaching in one, and equal emphasis with elementary teaching and administration and supervision in still another. Baylor College and Trinity University put greater emphasis on elementary than on high-school teaching, while Incarnate Word College puts greater emphasis on both elementary and rural teaching than on high-school. Texas Woman's College emphasizes high-school teaching less than either kindergarten or rural teaching.

[1]Figures only approximate.

It is the writer's reading of the returns that these Texas colleges in general conceive of preparation for high-school teaching as their major province in the training of teachers.

The fact that teachers do not usually begin their professional careers in administrative or supervisory positions tends to justify the somewhat minor emphasis on training for that work. The relatively small demand for the kindergarteners explains the attitude of the majority of the colleges there. It is encouraging that some seek to emphasize preparation for rural teaching. If they can "market their product," it is indeed a good sign.

TABLE II

RANK IN EMPHASIS GIVEN PREPARATION FOR THE SEVERAL TYPES OR LEVELS OF TEACHING SERVICE

College	Rural	Primary	Kindergarten	Elementary	High School	Administration and supervision
Abilene Christian	1	4	----	2	3	5
Baylor College	3	4	5	1	2	----
Howard Payne College	3	4	----	1	3	----
Incarnate Word College	4	2	----	1	3	----
Simmons College	2	4½	6	4½	2	2
Southwestern University	3	4	----	2½	2½	5
Texas Christian College	4	----	----	3	1	2
Texas Presbyterian College	--	----	----	1½	1½	3
Texas Woman's College	2	----	1	----	3	----
Trinity	--	----	----	1	2	----

It had been the writer's hope that quantitative support could be formed for the subjective judgment, or purposes in the first section of Table III in the data as to number of and enrollment in courses offered for specified purposes. The replies are here so confused that no use of the material seems possible. Some of the writer's colleagues may be correct in considering the same courses as general introductory courses and as specific preparation for one or more special levels of teaching, but the writer can not subscribe to the position. He can recognize the general value of some courses, but he believes in very specific training for specific types of teaching.

In a few years, when the 1921 certificate law is in full operation, such data as to certificates as we have here will tend to give objective evidence as to the fields of teaching for which an institution is giving preparation. Too small a proportion of the certificates accounted for in this study are under the new law, however, to warrant concessions. Our new and improved certificate law is faulty in providing that a certificate based on preparation for high-school work may make one eligible to teach in the elementary schools, the reverse of which is not true. Colleges that now try to guide their teachers in training may experience difficulty in that undertaking.

Concerning the types of teaching for which these Texas Colleges are preparing teachers, as concerning the other questions, inferences can be made only with the greatest caution from the data on the placement. The factors that necessitate this caution will be presented in detail later, but with its necessity in mind, it may be noted that the returns on their face indicate the following:

1. Only about 30 per cent of the teachers trained and placed by

the colleges, reporting on these items, go into the rural or village common schools. In spite of the fact that all of these colleges have a contingent of students who avail themselves of freshman college training largely as a means to certification, the great bulk of all their product goes into city or independent district schools. True not a few of these schools are in "rural-minded villages," but the school in the open country, where 50 per cent of the Texas children are being educated, receive much the smaller fraction of benefit from teacher-training in these colleges.

No criticism of the colleges should be inferred. Lacking, as most of them do, preparatory departments of their own, they can hope to draw only students who have studied in the high schools, and these, given the opportunity, will secure work less isolated and more favorably organized than the rural schools offer. It will be difficult for the colleges to function in training teachers for rural schools, so long as their output is so largely demanded in the cities and independent districts.

TABLE III

	TEACHERS PLACED BY Type of District		SENIOR COLLEGES Type of Teaching							
Colleges	Rural or Villages	City or Ind. Dis.	Kdg.	Elementary	H.S.	Prin. or Supt.	D.S.	Agriculture	M.T.	T'l[1]
Abilene Christian College	32	22	0	41	13	3	0	0	0	54
Baylor College	10	45	2	40	24	6	4	0	0	55
Baylor University	24	137	0	48	90	24	1	0	0	161
Incarnate Word College	0	0	10	35	10	5	0	0	0	55
Southern Methodist University	6	60	0	31	35	0	0	0	0	66
Southwestern University[2]	21	14	0	18	17	6	0	0	0	35
Texas Presbyterian College	7	3	0	10	3	0	0	0	0	13
Texas Woman's College	30	10	0	10	6	0	3	0	0	40
Total	130	291	12	233	198	44	8	0	0	479

However, it should be recognized that the placement records in general will understate the number of the teachers who go into rural school work. Rural trustees notoriously neglect all sources of information in selecting teachers. It is probable that of the college-trained teachers who do go into rural schools, a majority will not figure in the placement records.

Abilene Christian College, Southwestern University, Texas Woman's College, and Texas Presbyterian College report more placements in rural and village schools than in city and independent district schools. One is surprised at the report from Southwestern, yet it is not self-contradictory.

The colleges giving replies report twelve placements in kindergartens, 233 in elementary schools, 198 in high schools, and 44 in in superintendencies and principalships. The returns from Incarnate Word College make it seem that this college did not place its students in public schools. Deducting the figures for this school from the totals given, the distribution would read:

[1]Largest estimate to be derived from data.
[2]Three also in colleges.

Kindergarten	2
Elementary	198
High school	188
Superintendencies and principalships	39

The last mentioned placements are at least in part duplicates. It would seem, however, that the elementary schools benefit more largely from the teacher-training work of the colleges than the colleges' own estimates of emphasis would indicate. The elementary school pacements seem larger than the high school placements in all schools reporting except Baylor University and Southern Methodist University, although they are substantially equal at Southwestern.

The placements in administrative and supervisory positions are nine or ten per cent of those reported in distribution. To the writer, the inference that the emphasis on this phase of teaching service should be proportionate can hardly be warranted on that basis, since some such placements may have been of former students. On the other hand the fact that work of this type is an ultimate probability in the careers of many who will at first be placed in purely instructional work, would suggest perhaps even more than a ten per cent emphasis.

All the data unite in showing that these colleges in general do little in training for the so-called special departments. The one domestic science teacher placed by Baylor University was evidently a "stray," since we have no facilities for giving such training. Baylor College and Texas Woman's College only figure in this column, and that for only about six and twenty per cent, respectively, of their placements.

The data on placement are our best evidence on another of our list of questions. Does the demand for their teachers indicate that the colleges are being successful in their efforts at teacher-training? That the evidence on this point is inconclusive is evident. The superintendents will be prone to say that the product of that training, whether satisfactory or not, must be accepted for lack of adequate numbers of teachers with more satisfactory training. The college departments of education may idealistically declare that they are conscious of limitations on their success which a part of the "demand" is not prepared to appreciate.

A more practical consideration is that the records of placements are a very inadequate showing of the actual acceptance of the product of the colleges by the schools. Many students secure positions independently. Many recommendations are never reported on, few placement committees are keeping adequate records, and "follow up" is probably practiced in few cases in which placement service is not extended to ex-students.

The data indicate that the schools reporting both items, know themselves to have placed directly about three-fourths as many teachers as they secure certificates for. The figures in juxta position are as follows:

TABLE V

	Certificates	Placements
Abilene Christian College	54	54
Baylor College	152	55
Baylor University	152	161
Incarnate Word College	78	55
Southwestern University	63	35
Texas Presbyterian College	10	10
Total	509	370

The writer can go no further in interpreting the data than to say that, considering the number of teachers who secure positions independently, and the probable number of unreported selections on recommendations, he believes that the two sets of figures indicate an acceptance of the product.

Indeed, when we face the last question, do the college plans for placement indicate their acceptance of responsibility in this critical matter?—the replies cause some surprise that the product is so largely placed directly. The very general lack of records indicates that the work is not highly considered or adequately planned. If it were considered important enough to be specifically a part of somebody's business, he would undoubtedly be expected to keep records and make a showing as to his success.

It is doubtful if the function is logically located in a good many instances. Requests "are referred to the dean" in one college. The work "is under the direction of the president of the college," in another. In some cases it is perhaps even less consistently handled. One college reports: "We have no bureau of appointments. All available teachers readily find places all along the line." Three others give no intimation as to their plans. Another indicates that systematic plans are in process of adoption. Baylor College, Baylor University, Southwestern University, Texas Christian University, Texas Woman's College, and Trinity University work through faculty committees. What facilities are placed at the disposal of these committees is in general not indicated.

The writer believes that placement and training are closely related phases of the same service; that it is a more vital matter than helping students get places; that it involves the responsibility of helping in the selection of the right people for the right places. If the work assumes large proportions at all, special secretarial assistance will certainly be necessary.

No one appreciates better than the writer the inconclusive character of the present injuiry. He accepts responsibility for part of its shortcoming. Part, however, is the result of lack of records, in the colleges, giving the data required.

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PUBLISHED BY THE UNIVERSITY FOUR TIMES A MONTH, AND ENTERED AS SECOND-CLASS MATTER AT THE POSTOFFICE AT AUSTIN, TEXAS, UNDER THE ACT OF AUGUST 24, 1912

The benefits of education and of useful knowledge, generally diffused through a community, are essential to the preservation of a free government.

Sam Houston

Cultivated mind is the guardian genius of democracy. . . . It is the only dictator that freemen acknowledge and the only security that freemen desire.

Mirabeau B. Lamar

CONTENTS

Executive Committee of the Conference

HARRY YANDELL BENEDICT, Dean of the College of Arts.

BESS HEFLIN, Adjunct Professor of Home Economics.

ROBERT ADGER LAW, Professor of English.

CLARA MAY PARKER, Adjunct Professor of the Art of Teaching.

EDWARD JACKSON MATHEWS, Registrar, and Assistant Dean of the College of Arts.

THOMAS HALL SHELBY, Director of the Bureau of Extension.

WILLIAM SENECA SUTTON, Dean of the School of Education, Chairman.

Committee on Program

ANNIE WEBB BLANTON, State Superintendent of Public Instruction.

EMMETT BROWN, Superintendent of City Schools, Cleburne.

HARRY F. ESTILL, President of the Sam Houston Normal College.

MARTIN L. HAYES, Professor of Agricultural Education, Agricultural and Mechanical College of Texas.

CLAUDE ANDREW NICHOLS, Professor of Education, Southern Methodist University.

MARY SHIPP SANDERS, County Superintendent of Schools, Williamson County.

WILLIAM SENECA SUTTON, Dean of School of Education, The University of Texas, Chairman.

RICHARD J. TURRENTINE, Professor of Education, College of Industrial Arts.

GEORGE FREEMAN WINFIELD, President of Wesley College.

PROGRAM

Each topic found in the following program will be discussed by any members of the Conference that may desire to be heard.

Friday, April 21, 1922

UNIVERSITY BAPTIST CHURCH

MORNING SESSION

9:30 A. M. to 12 M.

DEAN A. W. BIRDWELL,
Southwest Texas State Normal College, presiding.

What is the status of teachers employed in the rural schools of Texas?

AFTERNOON SESSION

2:00 to 4:30 P. M.

SUPERINTENDENT M. H. MOORE,
President of the Texas State Teachers' Association, presiding.

In the towns and cities of Texas, what is the status of:

1. Teachers employed in elementary schools?
2. Teachers employed in high schools?
3. Teachers of home economics, manual training, agriculture, and commercial subjects?
4. Teachers of newer subjects other than vocational?

EVENING SESSION

8:00 P. M.

Address: "What shall we do now?"—Livingston C. Lord, LL.D., President of the East Illinois State Teachers College.

Saturday, April 22, 1922

UNIVERSITY BAPTIST CHURCH

MORNING SESSION

10:00 A. M. to 12:15 P. M.

SUPERINTENDENT EMMETT BROWN,
Cleburne Public Schools, presiding.

In order that there be efficient teachers in the public schools of Texas, what should be done by:

1. The Legislature?
2. Local, county, and state superintendents?
3. Boards of education?

AFTERNOON SESSION

2:30 to 4:30 P. M.

SUPERINTENDENT R. B. COUSINS,
Houston Public Schools, presiding.

In order that there be efficient teachers in the public schools of Texas, what should be done by:

1. Colleges and universities?
2. Normal colleges?
3. Civic and other organizations interested in educational progress?

Studies to Serve as Bases for Discussion at the Conference Upon the Teacher-Problem in Texas

The Rural School Teacher in Texas—Dean J. Thomas Davis, John Tarleton Agricultural College, and Edward Everett Davis, Specialist in Rural Education, Bureau of Extension, The University of Texas.

The Elementary Teacher in the Public Schools in Texas—Leonard Power, Principal Franklin School, Port Arthur.

The High-School Teacher in Texas—Claude Andrew Nichols, Professor of Education, Southern Methodist University.

The Teacher of Art in the Public Schools in Texas—Miss Lida Hooe, Supervisor of Art, Dallas Public Schools.

The Teacher of Music in the Public Schools of Texas—Miss Elfleda Littlejohn, Instructor in Music, University of Texas.

The Teacher of Commercial Branches in the Public Schools of Texas—W. B. Mikesell, Supervisor of Public High Schools, State Department of Education.

The Teacher of Manual Training in the Public Schools of Texas—N. S. Hunsdon, Director of Industrial Education, State Department of Education.

The Teacher of Home Economics in the Public Schools of Texas—Miss Jessie Harris, Director of Home Economics, State Department of Education.

The Teacher of Agriculture in the Public Schools of Texas—Martin L. Hayes, Professor of Vocational Teaching, Agricultural and Mechanical College of Texas.

The Teacher of Physical Education in the Public Schools of Texas—Staffs of the Education and Physical Education Departments, Sam Houston Normal College.

The Function of the University, The Agricultural and Mechanical College, and The College of Industrial Arts in the Solution of the Teacher-Problem—Benjamin Floyd Pittenger, Associate Professor of Educational Administration, The University of Texas.

The Functions of the Normal Colleges in the Solution of the Teacher-Problem—Robert L. Marquis, President of Sul Ross Normal College.

The Functions of the Denominational Colleges in Solving the Problem—T. D. Brooks, Professor of Education, Baylor University.

The Functions of the Junior Colleges in Solving the Problem—J. O. Leath, Dean of Kidd-Key College.

On Saturday morning, April 22, from 8:30 to 9:45 a. m., the Superintendents' and Principals' Section of the Texas State Teachers' Association will hold a meeting in the auditorium of the University Baptist Church. The program, as announced by the chairman of the section, Superintendent A. L. Day, of Commerce, is as follows:

1. Does the Constitution of Texas Need Revision so far as the Section on Education is Concerned?—M. H. Moore, President Texas State Teachers' Association.
2. The Teacher-Training Agencies of Our State—R. B. Binnion, President East Texas State Normal College.
3. Important Phases of the High-School Teacher-Problem in Texas—F. M. Bralley, President College of Industrial Arts.
4. Business Meeting.

On the same day, at the same hour, the section of the Texas State Teachers' Association known as College Teachers of Education will hold a meeting in the auditorium of the University Y. M. C. A.. The chairman of that section, Professor J. F. Cox of Abilene Christian College, announces this program:

1. Duties and Responsibilities of Teachers of Education in Colleges and Universities in Texas Toward Education in General in this State—O. H. Cooper, Professor of Education, Simmons College.
2. How the Professional Teachers of Education may Function Through a Section of the Texas State Teachers' Association—E. D. Jennings, Dean of the College of Arts, Southern Methodist University.
3. Business Meeting.
   Question: To be or not to be a regular, recognized section of the Texas State Teachers' Association?

During the same period the Association of Texas Colleges will meet in the Sunday School auditorium of the University Baptist Church. Registrar E. J. Mathews, president of the Association, announces this program:

1. Comprehensive Examinations—J. P. Comer, Southern Methodist University.
2. Advantages of the Two-Semester Session—Charles Puryear, Agricultural and Mechanical College of Texas.
3. College Athletics in Texas—R. W. Tinsley, Southwestern University.

The members of the three groups named above, will actively participate in all the sessions of the Conference.

RAILROAD RATES.—The railroads have granted a one and one-half fare rate on the certificate plan. The purchaser of the ticket will obtain a "certificate" receipt from his local railway agent when he buys his ticket to Austin, paying full fare. If as many as 250 such certificates are presented in Austin, the return railway fare will be one-half the regular one-way rate.

THE STATUS OF THE TEACHER IN THE ELEMENTARY SCHOOL IN TEXAS

LEONARD POWER
Principal of Franklin School, Port Arthur

A special questionnaire was sent to 1000 teachers. Most of them were too busy to reply in time for the author to get the results ready for printing. To date only a few more than 100 have reported but their replies have been reduced to the following:

Ninety-eight per cent. have had some high-school training. Eighty per cent are high-school graduates. Twenty per cent. are normal school graduates while only 8 per cent. are university graduates.

CERTIFICATES

Permanent	35%
Permanent Primary	10%
First Grade	50%
Second Grade	5%

The average salary is $960.00.

DO THEY MOVE ABOUT?

Fifty per cent. are new in their positions this year. Only two out of ten have been in their present positions as long as three years.

WHAT DO THEY SAY ABOUT THE IMPORTANCE OF THEIR WORK?

All who have replied to date say that they are worth as much to the school system as the high-school teachers—when all qualifications are the same. Many report that they are now paid upon that basis and are encourged to get degrees and remain in the elementary school.

I give below also the results of a study of 603 teachers in five counties. These teachers are engaged in schools for

white children. I have not separated the high-school teachers from the elementary school teachers in this study. The information was obtained at a joint institute held last year in Port Arthur.

TABLE I. CERTIFICATES AND SALARIES

Kind of Certificate	Average Salary
Permanent	$1,376
Special	$1,280
Permanent Primary	$1,030
First Grade	$1,020
Second Grade	$ 766

Average salary of all white teachers is $1,013.

TABLE II. TEACHING EXPERIENCE

No. of Years	COUNTIES						
	Hardin	Jasper	Jefferson	Newton	Orange	Total	Per Cent
0	6	21	35	4	7	73	12
1- 5	37	46	142	37	21	283	47
6-10	22	14	109	11	3	159	26
11-15	2	8	35	3	4	52	9
16-20 and over	8	6	16	3	3	36	6
Total	75	95	337	58	38	603	100

TABLE III. NO. OF YEARS IN PRESENT POSITION

No. of Years	COUNTIES						
	Hardin	Jasper	Jefferson	Newton	Orange	Total	Per Cent
0	43, 57%	62, 67%	122, 37%	32, 55%	60, 25%	284	47
1	18	17	81	16	8	140	23
2	7	8	54	6	1	76	
3	1	1	28	2	2	34	
4	2	2	14	2	1	21	
5	1	0	6	0	0	7	
6-10	3	4	21	0	1	29	
11-15	0	0	10	0	0	10	
16-20	0	1	1	0	0	2	
Total	75	95	337	58	38	603	

TABLE IV. KINDS OF CERTIFICATES

Certificate	COUNTIES Hardin	Jasper	Jefferson	Newton	Orange	Total	Per Cent
Permanent	19	21	174	10	5	229	38
Special	2	2	27	1	0	32	5
Per. Primary	5	2	12	1	2	22	4
First Grade	34	44	115	32	16	241	40
Second Grade	15	26	9	14	15	79	13
Total	75	95	337	58	38	603	100

WHAT THE TABLES SIGNIFY

It pays teachers to get the higher certificates. Out of every ten teachers, four have Permanent certificates and four more have First Grade certificates while only one is teaching on a Second Grade certificate.

Only four out of every ten teachers who began teaching five years ago are now teaching. There is an almost complete change every ten years.

While many teachers leave the profession entirely, more leave one place for another. Half of all of our teachers are new in their respective communities each year. Only three out of every ten have been in their present positions longer than one year.

Table II fills us with hope when we look at the per cent. of teachers without previous experience. It is only 12% this year. It must have been greater for previous years because so few have had more than five years of experience.

THE STATUS OF TEXAS HIGH-SCHOOL TEACHERS

CLAUDE ANDREW NICHOLS

Professor of Education, Southern Methodist University

The facts contained in this study have been gathered by students of advanced and graduate classes in Southern Methodist University. The aspects reported have been limited to the training, years of experience, tenure of office and salaries of high-school teachers in Texas for the session of 1921-1922. Teachers in both the public and private schools have been included. All the information used has been taken from the Directory of Teachers in Texas High Schools, published by the State Department of Education. Principals and superintendents have been omitted uniformly so that the conclusions drawn should apply to teachers only.

TRAINING

Of the 2,797 high school teachers counted, 210 reported no high-school attendance or less than one year, 18 one year of high-school training, 77 two years, 282 three years, 2,210 four years or more of high-school training. From the facts concerning normal school, college or university attendance it seems probable that many may have attended high school but did not report it. On the other hand, many must have entered normal schools or colleges as adult specials without any previous high school instruction.

Of the 2,797 high-school teachers, 877 had attended a normal school; 200 teachers reported one year at a normal school, 397 two years, 173 three years, 92 four years, and 15 more than four years of such training.

There were 539 teachers that reported less than one year or no attendance at a college or university, 189 had one year of college or university training, 326 two years, 369 three years, 1,137 four years, 177 five years, 60 six years or more.

In regard to degrees, 1,259 teachers held no degree, 1,458 held a B.A., a B.S., or a Ph.B., 80 held other degrees, some of which are of doubtful significance; 70 teachers held a master's degree and 2 a Ph.D. The record of standard bachelor's degrees is not absolutely exact because those reporting higher degrees did not give the lower degrees in the directory. The extent of the possible error is, however, small.

Experience

On the score of experience, 465 teachers reported no previous high-school experience or less than one year, 505 had served one year as high-school teachers, 460 two years, 311 three years, 275 four years, 166 five years, 155 six years, 245 from seven to ten years, inclusive, 109 from eleven to fourteen years, 77 from fifteen to twenty years, and 29 over twenty years.

Tenure of Office

The records concerning tenure of office or the number of years of service in the schools in which they were employed at the time of the report shows that 367 were teaching their first year in the present positions; 1,056 had had one year, 470 two years, 275 three years, 176 four years, 88 five years, 70 six years, 159 seven to ten years, and only 136 over ten years of previous experience in the same places.

Salaries

A classification of salaries of Texas high-school teachers shows that 38 received less than $800, 318 from $800 to $999, 555 for $1,000 to $1,196, 592 from $1,200 to $1,395, 318 from $1,400 to $1,590, 456 from $1,600 to $1,890, 144 from $1,900 to $2,075, 57 from $2,100 to $2,295, 47 from $2,300 to $3,000. Of the teachers included, 272 or 9.72% did not state the salaries they received. The average salary based

on a more detailed study than that given above will not be available in time to be included in this report. The median salary is $1,260.

In connection with salaries it might be well to observe that, according to City School Circular No. 7, of the United States Bureau of Education, for the year 1921, Texas ranks thirty-first among the states on the average salary paid high-school teachers in cities from 30,000 to 100,000 in population, thirty-sixth in cities from 10,000 to 30,000, and thirty-eighth in cities from 2,500 to 10,000.

These are the plain, unvarnished facts about Texas high-school teachers. Observations and conclusions have been made sparingly because the bare facts tell the story. It is easy to recommend remedies, but it is more difficult to apply them and to make them effective. There is no doubt that the new certificate law will insure teachers with better training. Those schools that provide for gradual increases in salaries will retain their teachers for a longer time. Better salaries must come but they will not be provided until the public is convinced that efficient teachers deserve higher pay and must have it. More adequate professional training will be one of the most potent factors in leading the public to understand the situation.

TABULATED SUMMARIES

Tabulated summaries of the facts already stated are given below. The percentages represent the part each number or item is of the whole number of teachers.

HIGH-SCHOOL TRAINING

	No training reported	One year	Two years	Three years	Four or more years	Number reporting training
Number of teachers	210	18	77	282	2210	2587
Percentages	7.50%	0.64%	2.75%	10.08%	79.01%	92.49%

NORMAL SCHOOL TRAINING

	No training reported	One year	Two years	Three years	Four or more years	Number reporting training
Number of teachers	1920	200	397	173	107	877
Percentages	68.64%	7.15%	14.19%	6.18%	3.82%	31.35%

COLLEGE OR UNIVERSITY TRAINING

	No training reported	One year	Two years	Three years	Four years	Five years	Number reporting training
No. of Teachers	539	189	326	369	1137	237	2258
Percentages	19.27%	6.76%	11.65%	13.19%	40.65%	8.47%	80.73%

EXPERIENCE AS HIGH-SCHOOL TEACHERS

	No experience or less than one year previous experience	One year	Two years	Three years	Four years	Five years	Six years
No. of Teachers	465	505	460	311	275	166	155
Percentages	16.63%	18.06%	16.44%	11.12%	9.83%	5.93%	5.54%

EXPERIENCE AS HIGH-SCHOOL TEACHERS (Continued)

	Seven to Ten years	Eleven to Fifteen years	Fifteen to Twenty years	Over Twenty years
Number of teachers	245	109	77	29
Percentages	8.76%	3.89%	2.76%	1.04%

TENURE OF OFFICE

Years Reported in School of Present Employment

	No previous experience or less than one year	One year	Two years	Three years	Four years	Five years	Six years
No. of Teachers	367	1056	470	275	176	88	80
Percentages	13.12%	37.79%	16.8%	9.47%	6.29%	3.14%	2.86%

TENUE OF OFFICE (Continued)

Years Reported in School of Present Employment

	Seven to Eight years	Eight to Ten years	Eleven to Fifteen years	Sixteen to Twenty years	Over Twenty years
Number of teachers	111	48	70	30	26
Percentages	3.96%	1.74%	2.50%	1.07%	.92%

SALARIES

	Under $800	$880 to $999	$1000 to $1196	$1200 to $1395	$1400 to $1590	$1600 to $1890	$1900 to $2075	$2100 to $2295	$2300 to $3000
Number of teachers	38	318	555	592	318	456	144	57	47
Percentages	1.38%	11.36%	19.84%	21.16%	11.36%	16.30%	5.14%	2.03%	1.71%

STATUS OF THE TEACHERS OF ART IN THE PUBLIC SCHOOLS OF TEXAS

MISS LIDA HOOE, Art Supervisor, Dallas City Schools

1. The present status of the teachers of public school art in Texas can be understood by a study of the classes of art teachers in our public schools today. The art teachers form three groups, each with its distinctive type of work, —the art supervisor, the high-school art teacher, and the departmental teacher of drawing in the elementary grades. The first two are found only in city schools. The departmental drawing teacher, while a part of the city system, is often found in village and small town schools.

The art supervisors have received their training in the art schools and universities in the north and east. The position of the art supervisor is administrative. She trains teachers through conferences, model lessons, and exhibitions. She plans courses of study, establishes standards of good work, and should be an active factor in civic planning and in moulding the aesthetic taste of the community in which she works. Her salary is a little less than that of the elementary school principal or equal to it.

The high school art teacher must hold a degree. She can secure her degree, major in art, and receive her art training in the required four years in many northern and eastern universities; or she can complete the four years' course in our state university and receive her degree, but she must then go to an art school or university for one, two or more years' art training before she is prepared for art work in a high school. But she will receive the same salary even with this extra training in art as other high school teachers who became English, Latin, or mathematics teachers as soon as they received their degrees from the state university.

The departmental drawing teacher is a regular grade teacher whose training, qualifications, certificate, and salary are co-equal with the other grade teachers, but who must

possess, in addition, some ability and training in public school art. This training can be obtained in our state normal schools and is supplemented by training under the art supervisor.

The art work in primary and lower elementary grades is done by the regular grade teacher who works independently or under the direction of the supervisor. In the rural schools, villages, and towns, art instruction is an elective subject depending upon the personal qualifications and desires of the teacher. There is no supervision and no check-up on such work. Notwithstanding the absence of encouragement and requirements some very commendable work in drawing is to be found in some rural schools and in many villages and towns throughout the state. The greatest handicap is lack of good standards of work and the failure of the next teacher to carry on the work of her predecessor.

There are no state requirements in drawing either by certificate or demands made of normal graduates. All art training is entirely elective. The teachers who are candidates for third grade certificates may elect drawing as one of their optional subjects. Such young men and women have experience and very limited qualifications; they teach in small rural schools where no drawing is attempted. This and the state adopted text-book in drawing form the only recognition of this subject.

In Texas, at present, there are twelve art supervisors and eight high-school art teachers, four of whom teach in the high schools of the city.

2. A reasonably ideal status is one in which; (1) every primary teacher and enough grammar grade teachers are prepared in our own state schools to give to every child an elementary education in art and art appreciation; (2) every high school is prepared to offer art training to children of special ability or those who elect this subject; (3) state supervision is furnished in public school art to plan courses of study to fit local needs in various communities, standardize the work, and to see that every child is given an elementary education in art and art appreciation.

3. What Texas should do next in order to move toward that ideal status:—

1. Require a minimum course in public school art in all the elementary schools of our state.

2. Demand that public school art be placed on the required list of subjects for teachers' certificates. It is now elective for third grade certificate only.

3. Establish a State Supervisor of Art who shall work directly under the State Department of Education, and whose duties shall be to see that courses of study are prepared suited to the peculiar needs of communities; assist in training teachers, and standardizing the art work in elementary schools, high schools, and normal schools.

4. Let the normal schools require a minimum course in art training for all graduate students who prepare to be primary teachers; and offer a more complete course for teachers who wish to specialize in art work and to become departmental or special art teachers.

5. Let the normals, Industrial College, and University offer courses in art training by which high-school teachers and art supervisors may receive art training, major in art, and receive their degrees without having to attend institutions in other states. The state should be prepared to train those who must in turn assist in training the teachers.

THE PRESENT STATUS OF PUBLIC SCHOOL MUSIC IN TEXAS

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As a school subject in the state of Texas music is so new and undeveloped, comparatively speaking, that no records are on file as to the cities which include it in their curricula nor as to the teachers who teach it. Therefore, in order that fair and reasonably accurate conclusions might be reached in this discussion, the superintendents of 200 independent school districts were asked for information as to the music situation in their schools. These two hundred school districts are representative of the entire State, including all the cities and large towns and a number of the smaller towns, together with a few districts of less than 800 scholastic population. The response to the request for data was excellent and, although in some cases the superintendents were uncertain as to the qualifications of the teachers, on the whole, the information sent in was full enough to be taken as the basis for the conclusions herein set forth.

For the purpose of arriving at a clearer understanding of the subject, it may be well, before going further, to define just what is meant by *Public School Music.* Strictly speaking, the term embraces any and all of the musical activities of the public schools, but as many of these activities are unorganized and of a purely recreational nature, and others are open to only a limited number of the pupils, I shall here limit my definition to include only that music instruction which is offered to public school pupils on the same basis as the other school subjects. In other words, it is music instruction which is a regular part of the course of study, available to all pupils without the payment of tuition fees, the teachers being regularly employed by the board of school trustees and paid out of the school funds.

There are in Texas fifty towns, large and small, which include music in their courses of study. These towns range in population from 160,000 to 1,500. The small school systems employ special teachers who teach the music in all the grades, while the larger cities employ supervisors who direct the work of the special teachers and grade teachers. There is much diversity in the methods of the adimnistration of the work. In some of the large cities the work of the high schools is entirely separate from that of the grades, that is, the supervisor directs the music instruction of the elementary schools only, that of the high schools being in charge of special teachers. In other cities, the music work of the entire school system from the kindergarten through the high school is directed by the supervisor. Many towns give regular music instruction to elementary grade pupils but cease this instruction when the pupils enter high school. Still others employ a teacher for the high school only, letting the grade teachers do as much or as little music work as they choose or are able to do.

Besides these fifty towns which have their music instruction on a systematic basis, there are many other towns in the state which are giving their school children a taste of music, although it is only a taste. In this class are the schools which include the singing of rote songs in their morning exercises. In some of the schools the grade teachers are required to teach music as best they can, with little training, if any. In others there are school bands, orchestras or choruses directed by an interested teacher. In still others, the piano teacher, who has the use of a room in the school building in which to give private lessons, helps the school choruses and bands. In many of the rural schools, the teachers allow the children to sing patriotic songs on special occasions; in some others (but these are few), the teachers are trying to *teach* the pupils a little music. All of this sort of music is unsystematic, without any special aim and only for recreational purposes.

Returning to the consideration of the fifty school systems having regular music instruction, it is interesting to observe

the data relative to the education, professional preparation and experience of the supervisors of this instruction. In the first place, nearly all are women, the only two men listed being special high-school teachers. None are under twenty-one years old and few are past middle age. The average age is thirty. Most of them are native Texans, the others are from the Southern states, a few from the Middle West. Thirty are high-school graduates and only three have had less than three years in high school. Twenty-nine have had four years or more in college or normal school. Sixteen have had less than four years in college but more than one. In addition to their regular college or normal school work forty-two have had special training in public school music. This training was taken at such schools as Northwestern University, Columbia University, Cornell University, Sophie Newcomb College, Baylor University and Baylor College, College of Industrial Arts, the Texas State Normal Colleges, University of Texas, and such conservatories as the Institute of Musical Art, New York, Cincinnati Conservatory and other music schools of recognized high standing. Thirty-six of the fifty supervisors have Texas State Teachers' Certificates, seventeen permanent, the remainder first grade. Those who have no state certificates usually have certificates in music from the schools in which they took their training, although a few are teaching without certificate of any kind, apparently. Twenty-four have been grade teachers with an average of five years' experience. The fifty supervisors have had an average of nearly four years' experience in the supervision of public school music. They have all held their present positions for at least a year, the average length of service being three years. The minimum salary paid to a music supervisor in Texas is $800, the maximum $3,000, the average $1,329 per annum.

Summarizing our data, it is apparent that public school music is at present far from being well established in Texas. Comparatively few towns and cities include it as a school subject, for fifty towns constitute a small number in a state the size of ours. There are no minimum requirements set

by the State for supervisors and special teachers of music, each local school board setting its own standard with more or less successful results. While the majority of supervisors have certificates of some kind, there are a few who are teaching without certificates of any kind. As a group the supervisors in the Texas schools make an excellent showing in the record of their educational fitness for their positions. They are mature women, with high school and college education in addition to their special training. They are the better fitted for supervision by having had experience in the grades. It should be noted also, that each new year does not see them in new position; the average length of experience in their present places is three years.

The State of Texas does not yet recognize music as a subject suitable to be taught in public schools. Music is not one of the subjects prescribed by law to be taught in the public schools. As a natural result, applicants for teachers' certificates need not study any music at all. A little over a year ago, music was included amongst the optional subjects for a second grade certificate. Although this action marks a step forward, it has little real effect on the grade teachers' preparation and fitness to teach it. For two years, music has been accepted by the State Committee on Classified and Accredited High Schools as a subject suitable for affiliation and this decision on the part of the State Committee has greatly stimulated the interest taken in music by school men. So far, only two high schools have met the required standard in order to be accredited in music, but this is as it should be, for it is hardly to be expected that schools which have never before given instruction in music and therefore have laid no foundation in the elementary grades could meet the requirements in such a short time.

Ruskin tells us there are three things every man ought to know: (1) where he is; (2) where he is going; and (3) what he is going to do about it. We have just weighed the facts in the school music situation and have found out just about where we are. The next thing for us to do is to know our objective, the ideal status toward which we

should direct our effort. I believe the best expression of an ideal objective was made by the Music Supervisors' National Conference three years ago when its president stated the creed of the Conference thus: "Every child should be educated in music according to his natural capacities, at public expense, and his studies should function in the musical life of the community." This statement of Mr. McConathy places the proposition squarely before us; and, elaborating it, he says, "(1) that the public school shall discover the natural musical capacities of each child; (2) that music education in the public schools shall be differentiated in accordance with the capacities of the different children; (3) that all lines of music education involved in meeting the needs of the children of all types and capacities shall be offered at public expense; and (4), that there shall be a close relationship between the music teaching done in the public schools and the musical life of the community."

I know of no better or higher standard than this to set for our public schools in Texas. If this aim could be attained, we should have state laws requiring music to be taught in all public schools; requiring all grade teachers to have sufficient preparation to enable them to teach music in the elementary grades; requiring all applicants for elementary certificates to pass an examination in music; requiring all supervisors and special teachers to have either a supervisor's certificate or a special teacher's certificate.* These requirements would be but the beginning, of course. In addition, we should have not only vocal music, but instrumental instruction as well. It has already been satisfactorily proved that public school classes in piano and violin are entirely feasible. We should have a band and an orchestra, as well as choruses, in every school. In short, every child would have the opportunity to develop musically to the extent of his desire and natural capacity. It goes without saying that, if such an ideal situation could be developed

*The new certificate law passed by the last Legislature includes requirements for supervisors and special teachers of music, but this law does not go into final effiect until 1925.

in the public schools, the community life would feel very beneficial effects.

This ideal status cannot be attained in a few years. Of necessity, the evolution of music education, as of any other kind of education, is gradual and apparently slow. But Texas has already an excellent start toward the goal I have outlined, and when one compares the status of music in the public schools a few years ago with its present status, steady progress can be clearly observed. Public interest is gradually awakening. The club women in the state are actively engaged in aiding the development of school music. School superintendents are evincing more interest in the work. The colleges and normal schools are offering more opportunities to teachers to prepare themselves to teach school-music. All of this is significant of the progress that is taking place, but something more definite and concrete is needed to give real impetus to music education in our schools. The first essential is a state law requiring music to be taught in all public elementary and high schools. Not until such a law is passed will it be possible to set statewide standards for teachers of school music, and until such a law becomes a fact such progress as may be made will be uneven and confined mainly to the larger cities and towns. The passage of such a law would not, of course, mean that any sudden improvement would take place in the public school music situation, but it would mean that the state would acknowledge the value of music in education. Such recognition on the part of the state would lay a foundation for the rational growth of a subject which heretofore has been neglected; it would give music an opportunity to take its rightful place in that broad education which is necessary for the full and well-rounded development of "all the children of all the people."

COMMERCIAL EDUCATION IN TEXAS

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Of the four branches of vocational training, business education alone has had to proceed without federal aid. Agriculture, home economics, and industrial education, all receive special aid from the state and federal governments. Business training is therefore interesting as an example of the way vocational education fares when dependent wholly upon local districts. It is certainly not because of relative unimportance that commercial education was left unaided, since business has increased tremendously in recent years of Texas history. The aim of this article is to indicate the present status of commercial education in this state, and possible measures for its improvement.

One measure of the recent growth of commercial education in the public schools of Texas is its progress in classified or accredited high schools and academies, for outside of these there is little public school commercial education offered.

Original accrediting in commercial subjects during the last four years has been granted as follows:

In the spring of 1918 to 36 schools.
In the spring of 1919 to 60 schools, an increase of 66% for the year.
In the spring of 1920 to 85 schools, an increase of 41% for the year.
In the spring of 1921 to 118 schools, an increase of 39% for the year.

The number accredited last year is 328% greater than the number of schools accredited four years ago. This is a greater rate of increase than for any other group of subjects. It reflects the natural local demand for commercial education.

There are 132 schools offering one unit or more of commercial work, out of a total of 544 classified or accredited

schools. There are 79 others of this number that have 150 or more high-school students which probably should be offering business training to satisfy local need or demand. Eleven of these high schools have more than 500 students each, and are located in cities having well attended private business colleges. Thus it is seen that, while the natural growth of business training has been rapid, it has not been so rapid as is needed.

THE PROGRAM, AIMS, AND METHODS

The public schools have in most part copied the program and methods of the private commercial schools, but not their aims. The subjects most common are bookkeeping, shorthand, typewriting and commercial arithmetic. The method of teaching the first three of these is the individual instruction method developed by the private schools for students who enter and withdraw one at a time, at irregular seasons. In aims the two types of schools differ. The private school wants its students to complete the course and get a job as quickly as possible, as the school is usually paid for the course rather than by time. The public high school aims to hold the students for a full four-year course, of which the commercial work makes up a minor part. Evidently the public schools should work out subject-matter and methods in harmony with their own aims. For instance class study of bookkeeping and elementary accounting is found, by trial in the Austin High School, to be more effective than the individual set work which it replaced.

Of the 132 schools reporting one unit or more of commercial work 45 offer bookkeeping alone, 8 offer stenography and 33 others offer bookkeeping and stenography with one or more other business subjects. Bookkeeping is often taught by the superintendent, which accounts for its being so frequently the only business subject. He can let his little class of juniors or seniors work at their seats while he is away at other business, and it is thus a convenient subject for the superintendent.

A half year of economics has been generally adopted during the past two years, coincident with dropping English history. Except in the large cities, it is taught by the history teacher, as a rule, more as a social science than as the foundation of business philosophy.

A study of accrediting of commercial work by subjects rather than by schools that have been granted accrediting gives these results:

In Economics ½ unit credit is held by	58	schools
In Commercial or Advanced Arithmetic ½ unit by	112	schools
In Bookkeeping one unit is held by	53	schools
In Shorthand and Typewriting from one to two units by	54	schools
In Commercial Geography ½ unit is held by	10	schools
In Commercial Law ½ unit is held by	13	schools
A total of classes taught with accrediting of	300	schools

These subjects are also taught in other schools in which they have not yet been recognized for credit. These are practically the only business subjects that are attempted in the public and private secondary schools in Texas.

None of these subjects is open to students of the first or second years of high school, excepting commercial arithmetic, commercial geography and typewriting, which are offered to second-year students in a small minority of cases. It is an exceptional case in which any commercial work is open to first-year students, or in which bookkeeping or shorthand is offered below the third year.

In the Cleveland survey it was discovered that training in stenography or bookkeeping was useful for girls, but that such training was not equally valuable for boys. Such work was not in line of promotion for boys, and such definite training was likely to prove a handicap by causing them to seek "blind alley" jobs. Girls continually practice stenography, bookkeeping, or machine operating. They perform the same specialized service regardless of the kind of business that buys the service, and their chance of promotion depends upon a better performance of their special work.

Boys are expected to get a part of it. Even when retained in the same business they are moved about from one kind of

work to another and their chance for promotion depends upon adaptability, ingenuity, and general intelligence. Few of them can use any shorthand; some may find use for elementary typewriting, elementary bookkeeping, and office practice, such as could be acquired in half-year courses.

It is found to be unusual for any boy or girl to use special training in both stenography and bookkeeping. They should become adept in only one. Even for one who follows bookkeeping, the maximum practical need in previous training is as follows, according to consensus opinion of employers:

"Understanding of debit and credit.
Understanding of posting.
Ability to take off a trial balance."*

Accuracy in figuring, neatness, and good penmanship are desired characteristics which are not exclusively matters of bookkeeping.

It is suggested that the committee on classification and accrediting and the affiliated colleges recognize a one-half year course in bookkeeping for accrediting for college entrance, as well as the one-year course now recognized. This might require the equivalent of Set I of the Twentieth Century course. It should be only upon careful vocational guidance that boys or girls should be encouraged to go beyond this much bookkeeping or a one-half year course in typewriting and office practice. Those expecting to specialize could advisedly go further. Others might use the time better in other business courses.

Boys can start in minor business jobs at an earlier age than girls, and with less special training. They can get more training in the business itself for their usual line of promotion. Consequently fewer boys continue through high school, by an average ratio of about two boys to three girls. The boys that stay should be rewarded by fitness (1) to start at a higher point, (2) to gain promotion faster,

*The Cleveland Foundation Survey: Boys and Girls in Commercial Works, p. 152.

or (3) to fill ultimately a larger place than if they had dropped out for an earlier business start. Otherwise their high school years will prove unprofitable.

It is generally conceded that business success of boys depends more upon personality and favorable habits and traits of character, than upon any knowledge that can be imparted through school text books. Fortunately it is also being found that personality and favorable habits can be improved by direction and training.

To promote the development of the positive qualities that make for success, the following suggestions are offered. (1) Select teachers with strong, favorable personality, with some business experience, and pay them what it takes to hold such persons. (2) Make up the high school English course of the kind of training that is generally known to be essential to business success. For details see outline of English for Business in Texas High School Commercial Bulletin, number 116 of the State Department of Education. (3) Give the students a sympathetic, intelligent interest in the business of the community by actual contact with some of its activities. (4) The present practice is generally satisfactory for girls if the course includes special training in one selected line, with a general course. (5) The following is suggested as a high school course for those who are aiming at business service:

First Year—
- English, including much oral and written composition.
- General or Introductory Science.
- Commercial Geography, including survey of local industries, resources, commercial and public institutions, ½ unit.
- Typewriting with office practice, ½ unit.
- Elementary algebra, with practical applications.

Second Year—
- English, using a Business English text as supplementary.
- Commercial Arithmetic, ½ unit, followed by
- Elements of Bookkeeping, ½ unit.
- Commercial or industrial history, (Especially of the United States).
- Elect a science or language, or both if able.

Third Year—
(Shorthand or Advanced Bookkeeping, if intelligently elected, especially for girls).
English.
Modern history.
Elect two or three from such studies as science, language, mathematics, commercial law.
Fourth Year—
English.
A year of social science, such as economics, sociology, psychology.
Two or more electives to follow courses formerly chosen.

TEACHERS—SELECTION AND TRAINING

Much of the success of training for business depends upon the teachers. Controlable factors upon which an adequate supply of proficient teachers depends are as follows:

I. Defining minimum qualifications for good teachers.
II. Requiring that minimum standards be met by naming them as requirements for certification.
III. Providing facilities for the desired training of commercial teachers within the state.
IV. Providing emoluments that will induce a sufficient number of young men and women of strong personality to meet the conditions, including:
    A. Salaries as high as such people can expect in actual business.
    B. Gradual increase in pay with increase of experience and training, such as is to be expected in business careers.

The following qualifications for teachers of business subjects in high school are suggested as representing a reasonable minimum under present conditions:

I. Graduation from a standard high school course as a starting basis.
II. Two years of college work beyond satisfaction of college entrance requirements.
III. Inclusion in the college work of one full course in education, one in the special subject, one course in English, and one course on special methods of teaching the subjects that the applicant desires to teach.

IV. Either previous teaching experience of a least one year, or three months of practice teaching in high-school commercial courses under responsible supervision.

V. At least one-half year of practical experience in business.

It may be interesting to note that numbers two and three, above are identical with the requirements needed to obtain a three-year special certificate under the new certificate law passed by the legislature last spring. This law requires that "After September 1, 1925, teachers who devote the major portion of their time to teaching or supervising special subjects shall be required to hold a high-school certificate or a special certificate, as provided for in this act, on the special subject in which they give instruction or supervise work." It is also noteworthy that no certificate of any kind is now required by law of a teacher who spends all of his time teaching commercial subjects excepting bookkeeping, arithmetic and economics. Certificates are required only for the teaching of the subjects prescribed for a state certificate.*

That it would require no hardship to demand certificates of all at the present time, that commercial teachers are not taking advantage of the laxity of the law, and that the requirements for certification named in the law are not too high are all attested by the following records as submitted by the 156 commercial teachers whose names appear in the latest High-School Teachers' Directory issued by the State Department of Education.

They all report certificates of first class or better.

Their school preparation is as follows:

Holding degree of B.B.A. from University of Texas	10
Having other B.A. degree	37
Having one year or more of college work but no degree	58
Showing no schooling excepting high school and special commercial training	47
Showing no training beyond high school	4

Thus it is seen that about two thirds of those now teaching have one or more years of college training, and most of the others have had special commercial training beyond high school.

In the new certificate law homage is paid to the high standards of the business world in that two years of college

*School Laws of Texas, sec. 103.

training are required for the least of special certificates, while a general first class high-school certificate good for two years may be obtained for one year in college, or a four-year certificate for two years in college with less restriction than for the three year special certificate. A great inconsistency exists in that a general certificate authorizes the holder to teach any special as well as any required subject, according to a sentence of law quoted above. Who would care to offer more for a part than is needed for the whole? The inconsistency lies in granting the general high-school certicate for as little as one year of college work. Two years beyond high school seems a reasonable limit for the year of 1925, with as many students as are now in the colleges and universities.

The new law demands one course in the special subject. The more common commercial subjects are taught in the university, the normals, and most first-class colleges. The law also demands a special course in methods of teaching the special subject. Examination of the catalogues discloses that, while there are courses on methods of teaching the three lines of vocational work fostered by the Smith-Hughes law, there are no adequate courses on teaching any of the commercial subjects.

A one-term course in teaching of commercial subjects is offered in the North Texas State Normal, at Denton. A six weeks portion of a course on teaching of commercial subjects is announced for alternate years in the Southwest Texas State Normal at San Marcos. It appears that no practice teaching opportunities are offered anywhere in the state, nor courses on the teaching of any of the special commercial subjects. For such courses, teachers appear to be going outside of the state, to the Gregg School, in Chicago, and to the Business Institute at Bowling Green, Kentucky.

The 103 teachers who claimed to have studied some commercial subjects before attempting to teach them named the following institutions as responsible for their training:

	Men	Women	Total
The University of Texas	11	13	24
College of Industrial Arts	....	5	5
The State Normal Colleges	6	9	15
Bowling Green or Gregg Schools	8	21	29
Private Business Schools	12	9	21
Other Colleges or Universities	5	4	9
Total	42	61	103

Fifty-three of the teachers of business subjects did not claim to have studied the subjects themselves.

The most logical agency for training commercial teachers would be the State University. It has:

1. The largest number of advanced business students and the broadest program of courses in business subjects.
2. The largest business community for observation work of any of the state schools.
3. Resources for practice teaching in the local high school.
4. The dpeartment of education of the University is the logical agency for special training of high school, normal school and college commercial teachers.

Last summer, while there was a general surplus of teachers there were not enough trained commercial teachers to meet the demand, though the salaries ranked rather above the average. Salaries of the 156 teachers may be grouped as follows:

	Commercial alone		With other duties		
	Men	Women	Men	Women	Total
$1800 or more	15	7	25	1	48
$1350 to $1799	16	26	10	7	59
$1125 to $1349	4	18	6	8	36
$1124 or less	2	8	1	2	13
Total	37	59	42	18	156

In experience commercial teachers appear to rank rather higher than the general average of high-school teachers. This is partly due to the fact that many superintendents teach one class in bookkeeping or economics along with their administrative duties. Figures for 156 commercial teachers at the beginning of the year are as follows:

	Men	Women	Total
Full time to teaching business subjects	37	59	96
One or more business subjects with other classes or superintending	42	18	60
Total	79	77	156

The same teachers grouped according to years of experience appear as follows:

	Men	Women	Total
Five or more years before this year	45	29	74
Two to four years before this year	16	27	43
One year before this year	6	8	14
No experience	12	13	25
Total	79	77	156

The twenty-five teachers who began this year showed rather better training than those of more experience as this group includes practically all of the ten with University of Texas B.B.A. degree.

Young people contemplating business work are in constant need of advice and guidance about business opportunities. Only those who have worked in business organizations are competent to give such guidance or to determine what training is of value. It seems desirable, therefore, that teachers have at least one-half year of practical business experience before beginning to teach.

Culture and a well rounded education are needed by business students quite as much as by others. The traditional classical studies are not the only studies productive of culture. An enlarged vocational and social outlook is cultural to a high degree. Vocational study brings understanding and sympathy with ever widening groups of workers. The traditional studies might be more enlightening if applied to existing conditions when possible.

A distinctive value of commercial education as a branch of learning lies in the fact that commerce and industry are in operation in the vicinity of nearly every school, so that they can be studied at first hand. Any school that attempts to teach business in general, and neglects to direct observation to the business of the community, is missing an opportunity for profitable and cultural laboratory education.

Moreover, standards of accomplishment set by business custom can be adopted for the classroom, with advantage, in stenography, bookkeeping, arithmetic, and other studies that may be directly applied. It is suggested that, while business training might be left open to anyone who can profit by the work, credit toward graduation should be allowed only for a high standard of efficiency, such as is required in business.

MANUAL TRAINING IN TEXAS

N. S. HUNSDON
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In 1896 the first manual training department in the state was organized and opened in September as a part of the Austin High School. This was made possible through the gift of John T. Allan, who left his entire estate to the Austin Public Schools for this purpose.

From 1896 to 1903 there was a great deal of agitation for the work, which resulted in the legislature's passing an act providing an appropriation of $20,000 for the two years 1903-05, for aiding in the introduction of manual training in the high schools of the state.

The University of Texas offered courses in manual training during the summer school in 1904. The equipment of the Austin High School was used in teaching these courses.

An act of the legislature in 1909 appropriated $32,000 per year for two years for aiding in the promotion of manual training in the high schools.

From 1911 to 1917 $50,000 per year was appropriated for further aiding in the promotion of the work in the high schools of the state.

About 160 schools received state aid for introducing the manual training work in their schools. This aid was granted for establishing, equipping and maintaining a department of manual training. A sum of not less than $500 nor more than $1,000 was given on condition that the board of trustees of the high school apply for state aid and meet certain requirements set up in the law. (Acts of 32nd Legislature, Chapter 26, Sec. 3.)

In 1917 when the state accepted the provisions of the Smith-Hughes Federal Law, the appropriation for aid to manual training was discontinued. According to Bulletin 142, State Department of Education, there are 85 high

schools in Texas which have manual training departments. From this we draw the conclusion that a number of schools which received state aid for equipping and maintaining manual training departments have discontinued the work.

Very few schools offer more than one kind of shop work, which is usually bench wood work, together with some mechanical drawing. In most cases these schools give drawing the first term (of the school year) and shop work the second term of the school year. Generally in such cases the work is extended over a period of two years, thus completing one year of shop work and one year of drawing in the two years. The time devoted to the work is usually ninety minutes per day for five days per week.

Only in the larger cities like Dallas, Houston, San Antonio, El Paso, and Fort Worth has any attempt been made to give a greater variety of work, such as bench work, turning, cabinet mill work, pattern making, molding and foundry practice, forging, machine shop, auto mechanics, cement construction, printing, tin smithing, or sheet metal work, and a four-year course in drawing.

Practically no attempt is being made to offer courses in vocational guidance in the grades preceding the high school or the first years of high school.

Since the acceptance of the provisions of the Smith-Hughes law, nine schools, three of which are negro, are offering day courses in trade training for a specific trade, the courses covering from one to two years in length.

Until the certificate law of 1921 passed by the 37th legislature, the State had never passed any law requiring manual training teachers to have definite quailfications before they could be employed to teach the work in the public schools. This matter had been left entirely with the local school board and the superintendent.

At the present time all of the six state normal schools are offering courses which are intended to train teachers for manual training positions in the public schools.

In order to ascertain the qualifications of the teachers now engaged in the teaching of manual training in the

state, on January 26th a questionnaire was sent to one hundred eighty teachers in the eighty-five schools having manual training departments. The following table will show the results obtained and give a fair idea of what kind of teachers are conducting the manual training work:

QUALIFICATIONS OF MANUAL TRAINING TEACHERS IN SCHOOLS 1921-22

No. cities having manual training departments to which questionnaire was sent					85
No. of questionnaire blanks sent out					180
No. of replies received					99
		Min.	Av.		Max.
Minimum, average and maximum age of teachers 1921-22		21	31		64
	0 yrs.	1 yr.	2 yr.	3 yr.	4 yr.
No. of teachers who have attended high school	9	2	14	13	57
No. of teachers who had manual training in high sc.	54	3	11	11	16
No. of teachers who had courses in—Bench Work					92
No. of teachers who had courses in—Cabinet Making					90
No. of teachers who had courses in—Wood Turning					81
No. of teachers who had courses in—Pattern Making					58
No. of teachers who had courses in—Foundry Practice					38
No. of teachers who had courses in—Forging					55
No. of teachers who had courses in—Sheet Metal Work					31
No. of teachers who had courses in—Auto Mechanics					24
No. of teachers who had courses in—Machine Shop Practice					54
No. of teachers who had courses in—Cement Work					35
No. of teachers who had courses in—Mechanical Drawing					87
No. with no college or normal school training					12
		1 yr.	2-yr.	3 yr.	4 yr.
No. of teachers who have attended college or normal school		4	16	38	29
No. who took special courses to prepare for teaching Manual Training					79
	No. Course	1 to 3	4 to 7	8 to 12	
No. who have taken courses in education	23	24	35	13	
	No. Degree		Degree		
No. who have college degrees	84		15		
No. who have had trade experience					64
	1 to 3 yrs.	4 to 7 yrs.	8 yrs. plus		
No. who have taught manual training one year or more	48	35	16		
	1 to 3 schools	4 to 6 schools			
No. who have taught in more than one school	86	13			
No. who received $1,000 or less the first year of teaching					56
No. who received more than $1,000 first year					39
No. receiving salary less than $1,500 during 1921-22					26
No. receiving salary over $1,500 during 1921-22					71
	Out of Texas	In Texas			
No. who were trained in Texas schools	36	53			
	No Certificate	Certificate			
No. of teachers having a certificate of some kind	61	33			

From the beginning in 1896 when manual training was first introduced in the public schools at Austin, the problem of securing qualified teachers who could measure up to the other teachers of the school has been a serious one. In-

stead of having the University, A. & M. College, and the normal schools take steps to train and provide properly qualified teachers, they were imported from schools of other states. Too often these teachers lacked proper training, were young, inexperienced, and over-paid, which facts caused just criticism of the work.

At this time as shown in above table, out of the ninety-nine teachers reporting it will be noted that only 53 have received their training in Texas schools.

In order to ascertain the present status of the work in the normal schools, the following table (see p. 41) has been compiled from a questionnaire sent to the normal schools to find out what is being done for improving the teachers of manual training.

From these data it seems there is no definite standard course being offered by all of these schools. Definite records of those who have taken these courses have not been kept as the Sam Houston Normal could not furnish any figures. The North Texas Normal College and the West Texas Normal sent no data. The East Texas Normal and the Sul Ross Normal are new schools, which accounts for figures shown.

From the foregoing it appears that:

1. The majority of manual training teachers are not as well prepared in special and general education as they should be for the work.

2. That the training schools—the normals and other institutions of learning—have not established standards to train teachers for definite work and have not taken the interest in this phase of education that it so richly deserves.

3. That school boards and superintendents have had to set up their own standards in selecting teachers. This has resulted in confusion, poor work and over-paid teachers in many cases.

4. No standards for courses in the schools where manual training is taught have been set up in the state. Each school makes its own course and standard. This being the

case, no two cities offer the same course for the same kind of shop work or drawing.

5. No state or local examination or test is required of the manual training teacher before he is employed. No certificate showing his qualifications is required and none is issued to him.

6. The 37th legislature passed a certificate law which requires all teachers of special subjects to have college training after 1925 before they can teach these subjects in the public schools. Bulletin 141, State Department of Education.

WHAT SHOULD BE

1. To meet the conditions of the new certificate law the University of Texas, A. & M. College, and the normal colleges should establish standard courses for the preparation of manual training and vocational guidance teachers. These courses should include courses in general education, psychology, methods of teaching, history of education, trade analysis, and vocational guidance. When a certificate or diploma is given, it should state what kind of work the teacher receiving it is prepared to teach.

2. A standard adequate minimum equipment located in a well lighted room of proper size should be required of the school board before the work shall be recognized by the State Department of Education for approval.

3. Every school having a four-year high-school course in manual training, if offering it at all, should have a try-out or vocational guidance course.

4. In the larger cities where there are a number of industries and large business concerns, both wholesale and retail, which employ many boys and girls who have not finished high school, there should be offered trade preparatory courses to fit for a definite vocation. Part-time cooperative courses should be offered to those still in school, and part-time instruction should be made available to employed boys and girls as general education, trade extension, or trade preparatory in content.

SCHOOLS

	East Texas Normal College—Commerce		North Texas Normal College—Denton		West Texas Normal College—Canyon		Sul Ross Normal College—Alpine		Sam Houston Normal College—Huntsville		Southwest Texas Normal College—San Marcos	
Total No. persons enrolled in manual training teacher courses:	55		No data sent in		No data sent in		16		Report no record		1075	
Total No. finishing one year	46		.....		.....		10		.....		680	
Total No. finishing two years	22		.....		.....		0		.....		420	
Total No. finishing three years	10		.....		.....		0		.....		180	
Total No. finishing four years and graduated	8		.....		.....		0		.....		160	
No. who have taught manual training after taking course	12		.....		.....		1		.....		415	
No. teachers from your school now teaching M. T. in Texas	8		.....		.....		1		.....		.....	
Subjects offered in training teachers of M. T. and No. hours devoted to each.	No. Hrs.	No. Students					No. Hrs.	No. Students		No. Hrs.		No. Students
Bench work in wood	....	18	.....	.....			.....	....	.....	20		610
Machine wood work	....	12	.....	.....			72	5	.....	15		580
Wood turning	....	8	.....	.....			.....	....	.....	5		500
Pattern making	....	....	.....	.....			.....	....	.....	5		180
Molding and foundry	....	....	.....	.....			.....	....	.....	....		.....
Forging	....	....	.....	.....			.....	....	.....	....		.....
Machine shop	....	....	.....	.....			36	4	.....	....		.....
Concrete and cement	....	8	.....	.....			36	6	.....	....		.....
Art metal	....	....	.....	.....			.....	....	.....	....		.....
Auto mechanics	....	....	.....	.....			.....	....	.....	5		80
Plumbing	....	....	.....	.....			.....	....	.....	....		.....
Printing	....	....	.....	.....			.....	....	.....	....		.....
Electrical work	....	....	.....	.....			.....	....	.....	5		.....
Mechanical drawing	....	12	.....	.....			72	8	.....	20		600
Psychology	....	12	.....	.....			72	12	.....	10		510
Principles of teaching	....	12	.....	.....			36	10	.....	5		480
History of education	....	....	.....	.....			.....	....	.....	5		210
Industrial education	....	8	.....	.....			.....	....	.....	....		.....
Algebra	....	....	.....	.....			108	3	.....	10		400
Geometry	....	....	.....	.....			.....	....	.....	15		380
Trigonometry	....	....	.....	.....			108	5	.....	5		260
Descriptive geometry	....	....	.....	.....			.....	....	.....	....		.....
Vocational guidance	....	....	.....	.....			.....	....	.....	....		.....

5. All cities of 50,000 or over should have a local director who is fully equipped to organize and supervise all phases of the work.

HOW CAN TEXAS APPROACH AN IDEAL STATUS?

1. All the institutions of learning which prepare teachers for service should get together, set up standards, and pull together to maintain them.
2. Work with the State Department of Education to have such laws passed as will bring about these ideals.
3. Offer summer courses for teachers already in service so that they may prepare in a reasonable time to meet the requirements set up by the state for manual training teachers.
4. Offer courses for superintendents and principals to train them for more sympathetic cooperation and supervision of the work.
5. Aid the Department of Education in preparing in bulletin form a standard course for each kind of work to be taught, giving in detail the minimum equipment required, qualifications of teacher, plans or rooms showing arrangement of equipment, heating, lighting, etc. These will be of great value to the teachers as well as the school authorities.

SURVEY OF THE NEEDS IN HOME-MAKING EDUCATION IN TEXAS

MISS JESSIE HARRIS
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(Bulletin No. 37, Federal Board for Vocational Education, Survey of the Needs in the Field of Vocational Home Economics Education, has served as a guide in making this study specifically for Texas.

This study is made only for the white population of Texas. A similar study is needed for determining the steps Texas should take in home-making training for the negroes).

THE IMPORTANCE OF THE VOCATION OF HOME-MAKING IN TEXAS

(Figures from U. S. Census Report, 1910).

Total number of white women over 21 years of age—722,063.

The census figures show that 80% of all women over 21 years of age are home-makers. On this estimate, Texas has 577,650 white women actively engaged in home-making.

The figures show that more people are engaged in farming than in any other occupation in Texas.

The total number of white farmers in Texas is 357,249. (Figures from State Department of Agriculture).

There are, therefore, 1.6 times as many women engaged in home-making in Texas as there are persons engaged in any other occupation—or, 220,401 more women engaged in home-making than men (and women) engaged in farming.

IS HOME-MAKING TRAINING NEEDED?

Since home-making, judged by numbers, is the chief occupation of the citizens of Texas, is any training needed for this occupation?

Here again statistics are interesting. According to the vital statistics (*World Almanac*, 1921) 13% of all deaths in Texas in 1918 were of children under 1 year of age. It is agreed by authorities that ignorance of the mothers is the chief cause of death during this first year. Poverty is also a contributing cause, but "ignorance increases the evils of poverty." Increased knowledge of child feeding, and instruction in selecting and buying food has decreased the infant death rate even under conditions of great poverty, proving that ignorance is the greater factor in infant mortality.

Of those children who do survive the critical period of infancy and reach school age, many are suffering the serious handicap of malnutrition. Studies made by the home economics extension service of the University of Texas, through nutrition clinics conducted in public schools of all parts of Texas, show that 30% of the children in the first three grades are more than 10% under weight. Dr. Emerson of Boston, an authority on malnutrition, considers that children as much as 7%, or more, under normal weight, are on the danger line. If children 7% under weight were included in the Texas studies, the percent of under-nourished children would be greater than 30%.

That ignorance rather than poverty is responsible for this condition, is proved by the fact that the investigations show that the percentage of under-nourished children in well-to-do families is appallingly large; and further, that an increase of knowledge of nutrition on the part *of the mother and child* has restored many children readily to normal weight and health.

These reasons are enough to convince one that training for home-making is necessary, but there are still further arguments. The home-maker is the chief spender and she therefore needs to know the goods she is consuming. A cotton buyer can waste or save thousands of dollars by the inaccuracy or accuracy of his knowledge of cotton. If the home-maker needs this knowledge, should she get it from the clerk, the grocer, the retailer; or should it be a part of

the education or training for her life work which it is the function of the state to provide through the public schools? There is also the further consideration, that home activities have so changed, and commodities have so multiplied, and conditions so changed, that the training needed for home-making cannot be gained at home as it formerly was.

WHAT OPPORTUNITIES DO THE TEXAS HOME-MAKERS, PRESENT AND FUTURE, HAVE FOR SECURING THE TRAINING NEEDED?

	White, only
Total number of girls of high school age in Texas..... (Scholastic enumeration of 1919-20—State Superintendent's Report).	163,733
Number of girls in high school.....	62,397
Girls of high school age not in school.....	101,336

Please note that there are more girls of school age not in school than in school, and remember that Texas has a compulsory school attendance law on the statute books. The present school law is fairly well enforced, but it extends only to 14 years of age. Should Texas extend the compulsory school age?*

The school apportionment paid by the State of Texas in 1920-21 was $14.50 per capita. This was paid for each child of school age enumerated.

At $14.50 per capita Texas spent $1,469,372 in 1920-21 for the education of 101,336 white girls who were not in the public schools. Should some of this money be spent in the education of these girls through part-time and evening schools? Does Texas need a compulsory part-time school system such as 22 states have already fostered?

*The above numbers do not include the girls who attended private schools. Therefore, the total number of girls of school age attending secondary schools would be somewhat larger; but, even considering these there would still be an overwhelming majority of girls of school age out of school.

The number of classified high schools in Texas, 1920-21 549
(Bulletin 132, State Dept. of Education).
Number of schools having any accredited work in home economics ..... 161, or 29 plus %
(Bulletin 132, State Dept. of Education).

The length of course is from one-half to four years, averaging 328 years of work. The average number of students per class is generously estimated at 16, which means 5,248 girls in Texas get as much as 1 year of home economics training, or about one girl out of twelve in high school and one out of every thirty-one of high-school age in Texas.

There is little or no opportunity for the 577,650 home-makers to secure instruction. Were such an opportunity offered many would avail themselves of it.

TEXAS HOME ECONOMICS TEACHERS.

(The figures herein given were compiled from Bulletin 127 of the State Department of Education—1920).

Teachers of home economics are all high school graduates.

Number of years college preparation for teaching home economics:

	Number	Per cent
One year preparation	12	4.8
Two years preparation	43	17.1
Three years preparation	55	21.9
Four years preparation	141	56.2
Total	251	

Of the total 221, thirty-nine were trained by institutions outside the state of Texas, or 15.5%.

It is impossible to estimate how many of these teachers were adequately prepared for teaching home-making. It is safe to assume that only those with degrees had any professional training; that no experience in home-making was required; that not all the degree graduates had training in methods of presenting their subject.

The greatest need in teacher-training is for an improvement in the methods courses. Most of the technical instruction in the teacher-training institutions is good, but very few of the graduates have had sufficient work in methods of teaching or in practice teaching. The vocational home economics teachers and teacher-training courses are an exception. Both professional training and home-making experience are required in addition to technical training for the teachers in these schools (46 in Texas, 1921-22).

No teacher-training institution gives a separate course with the child as the central idea. Such courses are needed. Portions of such work are given in various courses, but the work is only theoretical, and no practical work in child care and training is given. Such work cannot be taught in our secondary schools until teachers are trained for it. Courses in hygiene and home care of the sick are not general enough in the teacher-training institutions, and, in some instances, even when given, are inadequate.

HOW SHALL TEXAS MEET HER OPPORTUNITY AND OBLIGATION IN THIS REGARD?

I. The teacher:

"She should be a woman of sound training with sympathetic understanding of needs of pupils; and with ability to analyze the occupation of home-making for the community in which she lives." She should have some experience in the vocation of home-making, and her course of training should be broad enough to include all home activities and not merely cooking and sewing. The child is the center of home activities and should be the center of training courses for teachers of home-making.

II. Schools:

1. Texas should provide short unit courses for the older groups of girls and women—(evening schools).

2. Texas should provide part-time schools or classes for girls out of school, but of school age.

3. Texas should provide courses of study in home-making in every high school in Texas and two years of such work should be required of every girl. (Nearly all high schools now require two years of algebra of every girl; surely such a requirement would be harder to justify than a requirement of home economics).

4. Texas elementary schools and junior high schools should offer home-making instruction in the 6th and 7th grades since a large majority of girls leave school before entering the high school.

III. Course of study:

At present the instruction in home-making consists of cooking and sewing (except in a limited number of cases). The content should be more varied. It should, in addition, include at least the care of children.

Trained Teachers:

Such teachers will be experienced in home activities; trained in technical subject-matter to be taught; trained in the presentation of their subject-matter.

Need for Funds:

No state has approached an adequate program for home-making education without appropriating money for fostering home economics teaching in day schools, evening schools, and part-time schools.

The following facts stand out as factors:

1. Separate communities cannot be depended upon to see the need. Leadership is the state's prerogative.

2. Home-making education is expensive for the following reasons:

a. The equipment is costly.

b. A teacher can teach only 16 to 20 in a class.

c. Periods must be 90 minutes in length; hence only half as many classes can be handled per day. Facts b. and c. make home-making instruction four times as expensive as some other subjects.

d. There is a running expense outlay for supplies, etc.

In addition to appropriating funds for the day school, there should be funds for evening and part-time school work. Such work is more difficult to promote without state aid than the day school program, because the public school people have not yet awakened to the problem outside the day school, and, because of the inadequacy of funds for day school work, it is difficult to persuade them to spend any school funds for evening and part-time schools.

It is interesting to note the emphasis put on agricultural and home-making education by Texas in its appropriations for 1921-22.

All appropriations for colleges and normal schools are omitted and only those that are for persons outside the college are calculated. (No Federal funds are counted. If Federal funds were counted the contrast would be even more marked).

Agricultural Experiment Station	$113,950.00
Agricultural Experiment Sub-Stations	89,585.00
Extension Service, (the total $218,676 minus the amount budgeted for home economics extension)	169,726.00
Pink Bollworm	125,000.00
State Department of Agriculture	82,000.00
Warehouse and markets	271,050.00
Vocational Agriculture	10,000.00
(Note: A large Federal appropriation is available.)	
Total	$944,011.00
Total per farmer	2.62 plus
For Home-making Education:	
Extension service	$ 48,950.00
(Figure furnished by State Home Demonstration Agent, 1921-22 budget).	
Vocational Home Economics	30,000.00
Total	$ 78,950.00
Amount per home-maker	0.13 plus

More than 20 times as much money is spent per farmer as per home-maker for educating those in these respective vocations in Texas.

Is education for the farmer 20 times as important as education for the homemaker? Of course ignorance and carelessness in dealing with the pink bollworm destroys cotton bolls, and ignorance and carelessness in feeding babies can only destroy the babies.

This comparison is drawn between agriculture and home-making, because these two occupations rank numerically higher than any others in Texas. It is not the purpose to show that the state has appropriated a cent too much for agriculture. In fact, when the farmer prospers it means prosperity for all, and the schools also prosper. However, when the state also acknowledges its responsibility equally in the education of home-makers, will it not mean a new distinctive era of prosperity and well-being? For, if our civilization is built on agriculture it is built still more fundamentally on homes. Let Texas continue its generous support of agriculture, but hasten the day when home-making education will be one of this great state's projects.

STATUS OF HOME ECONOMICS EDUCATION IN SOME OF THE OTHER STATES

While no state in the union has, as yet, adequately provided for home-making education many of them have made rapid progress in this phase of education in the past five years. The Federal Vocational Education Act, which was passed by Congress in 1917, has done much to promote interest in and to advance home-making education in all of the states. The Federal subsidy available for this work is very small—only one-fifth of the amount available for agricultural or trade and industrial education—but Federal recognition of the importance of this work has given it a new impetus and has done much to stimulate the states to increased effort to provide home-making training for their girls. If the Home Economics Amendment to the Vocational Education Act which is now before Congress passes, there will be a more equitable division of the funds for vocational education, and home-making education will receive its just share; but in any event it will still remain the respons-

ibility of the state to see to it that its educational plans are broad enough to place home-making training within the reach of every potential home-maker through all day and part-time schools, and every actual home-maker through evening classes.

Notable among the states which are keenly alive to the needs for home-making training for all of its girls and women and to the responsibility of the state furnishing this training is our neighbor state, Louisiana. This state has passed a law requiring that home economics be taught in the eighth, ninth, tenth, and eleventh grades two double periods a day five times a week. Practically every high school in the state is offering a four year home economics course. Money was appropriated by the state to carry on this work until the schools were able to support it themselves. The appropriation was then withdrawn. The state at present appropriates money for supervision only.

Indiana requires home economics in the seventh and eighth grades.

Utah reports that "public opinion says that every girl must have at least one unit of home economics."

Arizona allows up to $2,500 of state funds to any schools for industrial education including home economics.

Utah appropriates the same amount of money for home economics as for agricultural education.

New York state appropriates two-thirds of the first home economics teacher's salary up to $1000 provided she spends her entire time teaching home-making subjects, and the second teacher of home economics may receive from the state one-half of her salary up to $1000 provided she spends her entire time teaching home-making.

The above are only a few of the states that are making excellent beginnings in working out adequate home economics programs, and the time is undoubtedly fast approaching when the training for the greatest of all vocations—Homemaking—will receive its due consideration and support by educational leaders all over the country. Can Texas afford to fall behind in this movement?

A STUDY OF THE TEACHING OF AGRICULTURE IN PUBLIC SCHOOLS OF TEXAS

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Introduction

In the short time that was available for this study it seemed best to limit the study to the high-school work. It was impossible in the time limit to study all the elementary schools and test out the agricultural teaching. It is hereby recommended that such a study be made by the State Department of Education or such committee or individual as the State Board of Education may designate.

SECURING THE DATA

The information had not been tabulated in the State Department of Education so that the list of teachers of high-school agriculture could be secured. A questionnaire was sent out to all the county superintendents asking for the name and addresses of each white teacher in the county teaching agriculture to students above the seventh grade. Replies were received from 56 county superintendents reporting 440 names.

Of the 440 questionnaires sent to these teachers, 119 were returned in time for this report. Of the 119 replies, 11 reported that agriculture was not being taught, 26 reports showed that the course being taught was not being taken by high-school students, 70 reports indicated that the course was of high-school grade and general in nature rather than vocational, 12 indicated classes under the provisions of the Smith-Hughes Act. In non-vocational agriculture the study is limited to the reports of 70 schools; in vocational agriculture the study is limited to the reports of 70 schools; in

vocational agriculture the reports from the 12 schools are supplemented by information that was available from other sources about the rest of the 85 white teachers of vocational agriculture under the provisions of the Smith-Hughes Act.

TEACHERS OF NON-VOCATIONAL AGRICULTURE

	Per cent.
Teaching Experience—	
Percentage of teachers teaching their first year	8.6
Range of teaching experience in years	1— 30.0
Median number of years teaching experience	7.0
Percentage of teachers teaching agriculture their first time	17.0
Range of agriculture teaching experience in years	1— 15.0
Median number years agricultural teaching experience	3.0
School Attendance—	
Percentage having attended high school or its equivalent	98.6
Percentage having graduated from high school or equivalent	78.6
Percentage having not the equivalent of high school graduation	21.4
Percentage having training of college grade	68.6
Percentage having graduated from two year normal course	22.8
Percentage having graduated from four year college course	7.0
Percentage having attended no institution of college grade	31.4
Agricultural Training—	
Percentage having no school instruction in agriculture	27.1
Percentage having had agricultural instruction only in high school	21.4
Percentage having had agricultural instruction in college or normal school	51.5
Percentage having had agricultural instruction in normal school	38.7
Percentage having had agricultural instruction in agricultural colleges	5.7
Percentage reporting instruction in general agriculture in normal school or agricultural college	41.4
Average number of weeks studying general agriculture	37.0
Percentage reporting more specialized courses in agriculture in normal school and college	24.3
Training in Science—	
Percentage reporting no science training	11.4
Percentage reporting physics of secondary or college grade	71.0

Percentage reporting chemistry of secondary or college grade	52.0
Percentage reporting botany of secondary or college grade	39.0
Percentage reporting zoology of secondary or college grade	35.0
Percentage reporting biology of secondary or college grade	32.0
Percentage reporting geology of secondary or college grade	20.0
Percentage reporting bacteriology of secondary or college grade	16.0
Percentage reporting physiology and anatomy of secondary or college grade	39.0
Average total number of weeks devoted to secondary or collegiate science	100.
Training in Economics and Sociology—	
Percentage reporting training in economics and sociology	46.0
Percentage reporting general economics	19.0
Percentage reporting agricultural economics	15.0
Percentage reporting general sociology	12.0
Percentage reporting rural sociology	26.0
Average total number of weeks devoted to study of economics and sociology	24.0
Training in Education—	
Percentage reporting no professional training	8.6
Percentage reporting training in psychology	79.0
Percentage reporting training in methods of teaching	79.0
Percentage reporting training in history of education	65.0
Percentage reporting training in school administration	54.0
Average total number of weeks devoted to studying professional subjects	74.0
Nature of Course Taught—	
Percentage teaching general agriculture	94.3
Percentage teaching plant production only	5.7
Percentage reporting grades below the eighth in class with high-school students	25.7
Median number class periods a week	5.0
Median number minutes in period	30.0
Total number boys reported in classes	432.0
Total number girls reported in classes	385.0
Average number pupils per teacher	11.6
Percentage reporting boys only in class	8.6
Percentage reporting girls only in class	7.4
Percentage reporting all members of class carrying home projects	14.3

Percentage reporting some home projects..... 27.1
Percentage reporting community work not agricultural.... 20.0
Percentage reporting agricultural community work..... 20.0
Percentage reporting no community work..... 80.0

Farm Experience—
Percentage reporting farm experience, (at least farm residence) 70.0

TEACHERS OF VOCATIONAL AGRICULTURE

Teaching Experience—
Data not available.

School Attendance—
Percentage having at least two years of college work..... 100.0
Percentage of agricultural graduates..... 41.3
Percentage having attended an agricultural college but not yet graduates..... 51.7
Percentage lacking less than one-half year of agricultural degree 19.0
Percentage having received their agricultural training in institutions other than agricultural college..... 6.9

Training in Agriculture and Related Subjects—
The minimum requirements set up by the state plan for 1921-1922 are at least two years of college work plus 42 semester hours of technical agriculture. The requirements for 1922-1923 are graduation from an agricultural college or its equivalent. The agricultural college course required of vocational teachers is made up approximately as follows:

Agricultural subjects.....38-40 per cent.
Sciences ..... 25-30 per cent.
Humanities .....15-20 per cent.
Professional subjects.....10-15 per cent.

The teacher of vocational agriculture must have had at least two years of practical experience on the farm after his twelfth birthday.

Professional Training—
The minimum requirements all teachers must meet is six semesters of education. Practically all have twelve semester hours or more.

Nature of Course Taught—
Practically all the vocational schools are offering two years of agriculture. A few are offering a third year. The two years are plant production and animal production. A third year consists of farm management and rural economics. Farm shop work is made a part of each course. Courses are usually alternated so that the same course is taught only in alternate years.

Percentage of schools teaching plant production	40.0
Percentage of schools teaching animal production	40.0
Percentage of schools teaching both animal production and plant production	13.0
Minimum time required for instruction—120 minutes a day.	
Six months' supervised home projects required of all pupils.	
Community work required of all teachers.	
Total number boys reported by 50 teachers (the only data available)	842.0
Total number girls reported by 50 teachers	96.0
Average number pupils per teacher	18.0
Of the 96 girls reported 49 are reported by 6 schools.	
Percentage reporting boys only	84.0
Percentage reporting girls only	None.
(Admission of girls to the vocational class is discouraged.)	

STANDARDS FOR VOCATIONAL AGRICULTURE

Objectives—

It is the business of vocational agriculture to make farmers or to make better farmers. If the boy has not yet begun farming as a vocation, this instruction is to prepare him for that vocation by inducing him through his class work and individual study to participate in the enterprises of farming. If the boy has become a farmer already, vocational agriculture brings him to a solution of the immediate problems he has found. Some pupils use vocational agriculture as a means toward general education or towards college entrance, but if the course is to be strictly vocational, those objectives must not determine the content or the methods.

Content and Scope—

There is no such thing as a course in vocational agriculture that is adapted to all parts of the United States or to all parts of Texas. It is inadvisable for Lubbock in its course in vocational agriculture to try to prepare its students to practice farming in the Rio Grande Valley. Participation is an essential part of the training, and it is seldom

possible or desirable to attempt this participation in the enterprises of farming except in the community where the school is located.

Since vocational agriculture aims to prepare the student for efficient and successful farming in a given community, the type of farming practiced there and adapted to that community determines the content of the course. To select the content of a course for a given community, it is necessary to have specific information about successful farming practices in the community. This information is usually obtained by the new teacher through the survey method. An attempt is made to analyze the farmer's job, to find out what he does, how he does it, and when he does it. If improvements can be induced or introduced, such amendments and new enterprises may be made a part of the vocational course provided it has been demonstrated reliably that they will be successful in the community.

Vocational agriculture should begin with the boy where it finds him. It should test his knowledge and skill in farming obtained from experience, and should build on this experience such new material as is needed to round him out into a successful farmer and citizen of the community. It would be folly to take time of the class to teach the boy how to plow if he were already an expert plowman. So it becomes necessary to take the analysis of the job of the farmer and use it as a score card with which to check up the accomplishments of the individual student and determine where he is lacking in knowledge, skill, and attitudes. These shortcomings constitute the content of the course. The important enterprise of the community such as the phases of live stock farming practiced, and the kinds of field and forage crops, truck crops, and fruit grown, constitute an important part of the course. In addition to these, then should be included a study of the care, manipulation, and repairs of farm machinery, construction and repair of farm buildings and equipment, the business side of farming, the marketing problems, and the relation of one farmer to another in co-operative undertakings.

This seems too big a job for the high school to accomplish. So it is in one or two years. but if the high school allows the boy to decide for himself whether or not he will prepare to enter college and select his course accordingly, the vocational boy in four years of high-school work can make a good start toward successful farming. When he graduates from the high school and becomes a full time farmer instead of a part time farmer as he has been for several years, he is not yet through with his vocational training. He is ready to take a "post graduate" course in part time or evening work during slack seasons in company with other farmers of all ages above sixteen years. Through a short unit course of four to ten weeks meeting two or three hours a week, he works deeper into any phase of his subject from year to year or solves special problems that arise from season to season.

Such, in brief, is the idea of vocational agriculture. It is intended primarily for the boy who is not going to college, but who is to go from high school to the full time practice of farming. Many boys who enter the class will not make this use of the subject. It is doubtful if many girls will practice farming except in very specialized forms. The presence of girls in the vocational agriculture class raises a doubt in the mind of the casual observer if the course is really vocational. In most cases girls act as a hindrance to the teacher in his effort to make the course really vocational, and their admission to the class is not to be encouraged unless the course is so specialized as to make it vocational for girls, or the particular girls admitted are in earnest about practicing farming.

It should be stated that this discussion of vocational agriculture is not limited to agriculture classes subsidized by Federal funds in accordance with the provisions of the Smith-Hughes Act.

Qualifications of Teacher—

The teacher of vocational agriculture should have those qualities of personality desirable in all teachers, such as

address, proper personal appearance, optimism, reserve, enthusiasm, fairness, sincerity, sympathy, vitality, scholarship, etc. He should be in sympathy with rural life and should be able to lead farm boys. The boy scout leader type of man has many qualities of personality advisable and desirable in the teacher of vocational agriculture. Many of the qualities mentioned above are native and, while they may be improved, cannot be acquired outright. What are the qualifications he must acquire?

He must have adequate agricultural training, both theoretical and practical. He should be able to take the place of the most successful farmer in the community and make equally as good showing. He should be the best farmer in the community. No longer are we content to have a teacher of agriculture able to tell a farmer how he ought to farm, but unable to follow his own advice. This means he must be able to farm in the community where he is employed to teach. It is a difficult matter to teach a man in four years of college work to be a successful farmer for any and every community in Texas. The college work needs to be supplemented by farm experience in a type of farming similar to that practiced in the given community and under similar conditions . It is difficult to train a teacher of vocational agriculture to teach in every and any community in Texas. The agricultural training and experience of a teacher for the Panhandle should be very different from those for the country around Jacksonville or for the country around Houston. Facilities must be available in the teacher-training institution for time to specialize in certain types of agriculture adapted to certain sections of the state.

The teacher of agriculture must be not only a good farmer but must be what we might call a 'trouble-shooter" and adviser for the farmers. It is very easy to run the automobile when everything goes right, but when the engine stops and refuses to start, more expert knowledge must be available. Just so one may be a good farmer so long as conditions are normal. The teacher needs to be able to sense the difficulty and prevent disaster.

It is not enough to be able to perform skilfully the ordinary operations on the farm, to produce successfully the various crops, livestock, etc., and to interest boys in agricultural activities. He must understand the intricate problems of marketing and co-operative understandings so he can lead his community into proper attitudes toward the big problems that cannot be solved by individual action. He must also be a skilful teacher in those methods best adapted to the nature of the subject taught. While he should be equal to the best teacher in the school in training, personality and real culture, he is fortunate if he is free from all idiosyncrasies that mark one as a "pedagog." His general bearing should impress one as that of a scientific farmer and business man rather than the traditional school teacher.

It is evident that the nature of the work suggested calls for high class native ability and for thorough and specialized training. Nothing short of a four year college course in a first class agricultural college should be accepted as a starting point for the teaching of vocational agriculture. Just as the vocational student is to pursue "post graduate" work in the short unit courses, so the teacher of vocational agriculture should pursue graduate work each year, but not necessarily the traditional type of graduate work. He should have short-unit courses to give him help where his experience shows he needs it. There should be a definite plan of improvement of teachers in service each year. It cannot be expected that the job of the teacher of vocational agriculture can be done well unless some such standards for teachers as are suggested above are attained.

STANDARDS FOR NON-VOCATIONAL AGRICULTURE

Objectives—

The term non-vocational agriculture may include a wide variety of objectives. It merely excludes the vocational idea. Of the numerous objectives that may in different instances influence the choice of subject matter and the method of instruction, only a few will be mentioned.

Agriculture may be used as general science to introduce the class to the field of natural science and guide them in their choice of the science courses in later years in high school or college. It may be used as a means of inducing appreciation and love of nature and rural life. It may be used as a general education of a scientific nature as are the average courses in geology and geography. It may be used as prevocational training to try out the pupil in interest and aptitudes and guide him in his choice of a vocation.

Nature and Scope—

The nature and scope of non-vocational agriculture will depend upon the objectives of the teacher as will the other characteristics of the course. Usually less time per week will be devoted to the study than in the class of vocational agriculture, and in most cases not more than one year of work will be offered. If it is to serve as an introduction to the field of science, agricultural facts will be used as a conveyance to carry the fundamental principles of various sciences. The study of farming will be used as a means of motivating the study of abstract science and as a means of tying scientific principles to their applications in the environment of the pupil. If it is to develop appreciation and love of nature and rural life, stress will be placed upon the beauty spots in nature that surround the farmer, the wonders of natural science as observed in agriculture and nature, and the wonderful and beautiful achievements man has accomplished in the modern up-to-date equipment and the beautiful rural and suburban homes. If it is to serve merely as facts that are good to know, a general education, a wide scope is offered to the teacher and choice will be determined by a variety of factors. If it is to serve as a "try-out" or as a guidance, it will constitute a study about the farmer's life and vocation with enough participation in the activities of the farm to test the pupil's interest and aptitude. In too many cases so-called vocational agriculture has been really prevocational agriculture.

Qualification of Teacher—

The teacher of agriculture as an introduction to science should be chiefly a scientist, thoroughly trained in all the sciences, at least those that are usually offered in the better type of high schools of the state, and interested in the agricultural environment of the pupil. He should know enough of the facts of agriculture to understand the practical application of the scientific truths so that he does not misrepresent the facts of agriculture. The teacher of agriculture as appreciation needs to be an enthusiastic lover of the beautiful in nature and in agriculture, and trained to interpret, if not produce, the beautiful in architecture, landscape art, etc. It is essential also that such teacher know enough of the cold facts about life and the vocation of the farmer, so that he or she will not paint the picture in such brilliant hues or will not surround the head of the farmer with such a halo that the course will mislead the student who may chance to use it as vocational guidance. The teacher of prevocational agriculture needs to know all about the vocation he can. He should have also a broad understanding of other vocations so he will not be unduly prejudiced in favor of agriculture and against other vocations.

It was clearly pointed out that no institution that is not essentially an agricultural college of the first rank can hope to turn out as graduates men qualified for the diverse conditions the teacher of vocational agriculture must meet. While the agricultural college graduate will be fitted to teach all the non-vocational courses listed above, with the possible exception of the course for appreciation, other institutions of college rank including the State University, the denominational colleges and universities, the College of Industrial Arts, the state normal colleges, etc., can train successfully teachers of non-vocational agriculture without installing equipment that approaches in amount and diversity that essential for an agricultural college of the first rank. The course of pre-vocational agriculture, when properly organized and taught, is perhaps more nearly vocational agriculture than it is non-vocational, and hence requires

more nearly the qualifications of the teacher of vocational agriculture. This is contrary to the general opinion of school administrators, for they are accustomed to think of the course in agriculture taught to rural children in the fifth, sixth and seventh grades by a young girl whose training for teaching the subject is twelve to twenty-four weeks in a class in general agriculture methods in a normal school, or eight weeks in a class in a summer normal and the successful passing of a written examination. Such courses are usually general education courses, as are geography and physiology, for the students already have had their "try-out" in actual experience on the farm, and the course adds none of those experiences to the stock in trade.

WHAT IS THE NEXT STEP?

In many respects the teaching of agriculture in the state does not reach the standards set up in the preceding paragraphs. Just how these standards can be reached is a long story and perhaps the specific recipe is not known. A few rather obvious suggestions are enumerated as follows:

1. A Campaign of Education—

A campaign of education through the teacher-training classes, summer normals, teacher's institutes, educational associations, and through the press should prepare school administrators and teachers to set up desirable objectives, select subject matter according to those objectives, and establish standards and requirements. A bulletin by the State Department of Education on this subject would be very helpful as a means of interpreting the State Course of Study.

2. Teaching More Agriculture—

There should be more agriculture taught in the high schools of the state. When the subject matter is properly selected, organized and taught, it will compare favorably with other subjects in the curriculum.

There should be more vocational agriculture taught in the state. The statistics show that a very small percentage of boys fourteen years of age and over are in college. They also show that a very small percentage of the boys who enter the high school pursue courses in college. A smaller percentage of rural boys go to college than of city or town boys. This elimination of pupils is a strong argument in favor of vocational training in the public schools as well as in college, and especially in the rural high school.

3. More Money for Vocational Agriculture—

More money is needed for all kinds of education, but there are factors that make vocational agriculture more expensive than some other subjects. It is not the most expensive vocational subject by any means. The chief items of expense are the salary of the teacher and the expense of transportation as he goes from farm to farm supervising the projects. The salary of the successful teacher of vocational agriculture ranges above the salary of the teacher of mathematics in the same school because the agriculture teacher is employed for twelve months instead of nine, and because his training and personal qualities are worth more on the market than are those of the average teacher of mathematics. This is true partly because the nature of the agriculture teacher's work relieves him of the competition of boys and girls, young teachers, who have had only one year of college work or maybe two or have secured their certificate through high-school work and a teacher's examination.

The fact that vocational agriculture is taught in the rural school, where it belongs, also subjects it to the inequality of the present system of raising money for education. Since the rural schools in Texas are floundering in their attempt to maintain even a relatively low grade, cheap school, it becomes all the more necessary for additional support if a relatively expensive type of work is to be introduced. In addition to revision of the method of raising and apportioning school funds, more extensive state aid should be given to

the rural schools to make it possible for them to maintain vocational agriculture.

4. More and Better Teachers of Agriculture—

Along with the campaign for agriculture in more schools must come the training of more teachers for the positions. Every rural teacher should know some agriculture, for it is a part of the environment of teacher and pupil that must be used in teaching all the subjects in the curriculum. Such teachers can not really be called teachers of agriculture. The duty devolves on the normal schools to furnish the big majority of the rural school teachers who should be inbued with the spirit of agriculture and rural life. But the teachers of agriculture should be especially trained as are the teachers of physics. To furnish the supply of teachers of non-vocational agriculture departments of agriculture should be introduced into the colleges and universities so that students could take agriculture along with other sciences. The departments in the normal schools should be kept busy giving the agricultural point of view to prospective rural school teachers, and preparing teachers of non-vocational agriculture. These institutions should discover men who are adapted in personality and interest to become outstanding teachers of vocational agriculture. Arrangements should be made so that such students with not to exceed two years' credit in such colleges can transfer to the A. & M. College without loss of credit, and finish preparation for teaching vocational agriculture. If school teachers and college teachers will carefully hand pick the material for agriculture teachers, great improvements will be made even though the demand increases many fold.

A STUDY WITH REFERENCE TO THE STATUS OF PHYSICAL EDUCATION TEACHERS IN TEXAS

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In an effort to ascertain the facts as to the status of physical education in Texas public schools, and the preparation of teachers of physical education in the elementary and high schools of Texas, questionnaires were sent to the 110 superintendents of all towns and cities of 2500 population and above, and to the 147 County Superintendents in Texas. The returns were from every section of the state, and the information obtained is typical of conditions in the state as a whole.

I. PHYSICAL EDUCATION IN TOWNS AND CITIES

From the 54 questionnaires returned by superintendents of towns and cities, the following facts were obtained:

Of the 54 cities, ten, or 18.5%, report one or more full time teachers or supervisors of physical education, one city reporting a physical education faculty of 14 full time members. Nine cities, 16.7%, report one or more part time teachers of physical education. Thirty-five, or 64.8%, of the cities report having no teachers of physical education.

TRAINING AND EXPERIENCE

Fifteen, or 27.8%, of the cities report physical education teachers with training. A variety in the extent and kind of training is found, ranging from "Military" and "Summer School" to graduation from a school of physical education of national reputation. Of these fifteen cities, only six, or 11.1% of all reporting, have teachers holding certificates in physical education.

As for experience, the 15 cities report a range from "none

before coming here" to ten years in the case of an ex-army officer. The median for experience is about three years.

Salaries paid to teachers and directors of physical education in these fifteen cities range from $675.00 to $3,000.00 annually, the median salary being $1,500.00.

PHYSICAL TRAINING IN ATHLETICS

Forty-six, or 85.2%, of the cities report teachers coaching athletic teams, twenty-seven of these, or 50% of all, giving a salary increment for this work.

54 cities report football teams.
42 cities report diamonds for baseball teams.
33 cities report tennis teams for boys.
29 cities report tennis teams for girls.
48 cities report girls' basketball teams.

(Owing to an error in printing the questionnaire, specific information regarding boys' baseball and basketball teams was not obtained).

Forty, or 74.1%, of the cities report that play of school children is supervised. In thirty-three, or 61.1% of the cities, supervision of play is by the classroom teacher; in four, or 7.3%, by physical education teachers or directors.

Twenty-eight, or 51.9%, of cities report play ground space in connection with the school, the amount of space ranging from nothing to 15 acres per school building, the median being 3 to 4 acres.

PHYSICAL EXAMINATION

Twenty-six, or 48.2%, of the cities give the elementary school children a physical examination, with a frequency ranging from once per year to twice monthly. The median frequency of examination is once a year. Sixteen, or 29.6%, of the cities give a physical examination to high school pupils, the range of frequency and the median of frequency being the same as for elementary school pupils.

In nine of these sixteen cities the Red Cross or County

Public Health Nurse assists in giving the physical examination; in seven, school nurses; in eight, school or local physicians; in two, the physical director. In several of the cities, the examination is given by one or more of these officials in co-operation.

HEALTH, HYGIENE, AND SANITATION

Thirty cities, or 55.6% of all, report instruction in health; thirty-three, or 61.1%, in hygiene; twenty-eight, or 51.9%, in sanitation; while four, or 7.4%, report that some attack is being made upon the problem of sex education.

Instruction in health, hygiene and sanitation is given in eleven cities by the class room teachers; in twelve cities by physiology and science teachers; in two cities by the physical director; in three by nurses; while in three, the instruction is given by a combination of two or more of these.

TYPES OF PHYSICAL TRAINING

In sixteen, or 29.6% of the cities, physical exercises are given the school children; in fourteen, or 25.9%, corrective calisthenics; in twenty-nine, or 53.7%, class room drill. Thirty-seven cities, or 68.5%, report one or more of these types of training given by the classroom teachers, while four, or 7.4%, report that they are given by the director of physical education.

PHYSICAL EDUCATION REQUIRED

Thirteen cities, or 24.1%, require all pupils in the elementary school to take physical education; while four, or 7.4%, report that from 50% to 90% are required to take it.

Five cities, or 9.3%, report that physical education is required of all high school students.

RELATION OF FULL TIME TEACHERS TO SCHOLASTIC POPULATION

The ten cities reporting full time teachers or directors of physical education range in scholastic population from 1750 to 34,000, with the median of 6,000. Thus a small city is as likely to have full time teachers of physical education as

a large city. In fact, the city reporting a physical education faculty of 14 full time members, Port Arthur, has a scholastic population of 5,600, or 1 full time teacher for every 400 pupils.

THE RELATION OF THE REQUIREMENT OF PHYSICAL EDUCATION IN THE ELEMENTARY SCHOOL TO SCHOLASTIC POPULATION

The thirteen cities requiring physical education of all elementary school pupils range in scholastic population from 900 to 34,000, the median being 3,600. Thus it is evident that a small city is as likely to require physical education of the pupils in the elementary school as is a large city.

II. RURAL DISTRICTS

From the 147 County Superintendents in Texas, 86 replies to the questionnaire were received from which the following facts were obtained:

No county in the state has a full time physical director, but two counties report a part time physical director.

Fifty-five, or 64%, of the 86 counties report no physical examination for rural school children. Thirty-one, or 36%, report physical examinations, ranging from physical examination in one school of the county to all the rural schools of the county. Fourteen, or 16%, of the counties report physical examinations in all the rural schools of the county. These also report the examination given, in every instance, by the County Red Cross Nurse. Only in the case of seven counties is there any physical examination for rural children except by Red Cross Nurses.

Practically 100% of the counties report basketball teams for both boys and girls. Thirty-three, or 38%, of the counties report football teams for rural schools ranging from one team in a county to 25 teams in Harris County. Thirty-nine, or 45%, of the counties report baseball teams in rural schools ranging from one team in a county to 64 teams in Cass County. Forty-seven, or 55%, of the counties report

volley-ball teams. These range from one team to a county to 38 teams in Runnels County.

The coaching in all the rural schools is done by grade teachers. Eighteen, or 21%, of the counties report some systematic physical training for all the children of the rural districts. (The people who filled out the questionnaire probably misinterpreted this question as the committee is sure the above percentage is entirely too high).

III. CONCLUSIONS

1. The public school districts of Texas, both urban and rural, show few teachers properly prepared to teach physical education.. Only six cities report teachers holding certificates in physical education, while there are no teachers certificated in physical education in rural districts.

2. The vast majority of the cities and practically all the rural districts of Texas provide no directed physical training except for candidates for athletic teams.

3. Only a beginning of physical examination and medical inspection of elementary and high-school pupils is found in the cities of Texas, while the only physical examination found in the rural districts is that given by the Red Cross Nurse.

4. There is some positive instruction in health, hygiene and sanitation in the public schools of Texas, but just how much is being done in developing health-habits, attitudes, and standards it is impossible to say. However, a beginning has been made and a better interest is being manifested on the part of public school authorities.

5. The extent to which physical education is found in a school system does not depend upon the size of the city, but seemingly upon a superintendent with a realization of the need of this type of work and with the financial support to provide it.

6. Apparently, there is a great deal of supervision of the play of public school children, but it is difficult to determine just how much of the supervision is merely "on-

looking" on the part of the teacher, and how much is directed play designed to promote formation of character on the part of future citizens.

IV. RECOMMENDATIONS

The following recommendations are submitted:

1. That physical education should be placed in the list of examination subjects for second class elementary and secondary certificates.
2. That all students securing teachers' certificates from teacher training institutions should be required to have had at least one unit of work in the teaching of physical education.
3. That teacher training institutions be asked to study the problem of training teachers and directors of physical education, and provide a course of study in physical education which would enable a student to major therein.
4. That a campaign be waged to impress upon the public, rural and urban, the need of physical education in the public schools and that the following organizations be requested to study this problem and give it a prominent place on their programs: The Texas Congress of Mothers, Parent-Teacher Association, Texas Federation of Women's Clubs, Texas State Teachers' Association, Rotary Clubs, Lion Clubs, Kiwanis Clubs, and other civic organizations.
5. That City Superintendents, County Superintendents, school officials, and civic organizations render every assistance possible in maintaining County Red Cross Nurses now in service and in providing such nurses in counties where they have not as yet been employed.
6. That some means be found whereby the schools may be provided with funds for maintaining and expanding the work now being done by County Red Cross Nurses.

V. THE IDEAL

1. A director certificated in physical education in each county and city school system in the state.

2. A division of physical education in the State Department of Education in charge of an expert in this field.

3. Public school teachers with sufficient training in physical education to enable them to co-operate with the county or city director.

4. Every child to have a physical examination at least twice a year and to have remedial defects removed. This work should be in charge of an adequate staff of physicians and school nurses. There should be one school nurse for every 2,500 school children.

5. A place in the daily program for corrective exercises to be given by the teacher under the supervision of the director of physical education.

6. Adequate provision for supervised play—every child playing.

7. An athletic badge test similar to that given in New York and Virginia, and recommended by the National Play Ground Association.

8. A development in every child of play interests which will carry over into adult life.

TEACHER-TRAINING AT THE UNIVERSITY, THE AGRICULTURAL AND MECHANICAL COLLEGE, AND THE COLLEGE OF INDUSTRIAL ARTS

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Doubtless all three of the institutions included in this report had accomplished considerable work in the incidental training of teachers from the time of their foundation; but courses especially designed for professional teacher-training began to be introduced at the University of Texas in 1893, at the College of Industrial Arts in 1908-09, and at the Agricultural and Mechanical College in 1917.[1] Different causes contributed to the introduction of these courses in each case.

At the University, professional courses for teachers came in response to a demand for trained teachers for high schools, and for trained officers of administration and supervision. In 1888, the State Superintendent of Public Instruction urged that a chair of pedagogy be established at the University "to prepare high-school teachers and scholarly county superintendents and city superintendents."[2] In the fifteen years from 1875 to 1890, the number of approved high schools in the state multiplied from 1 to about 30. The growth since its establishment of the department of education at the University has roughly followed the growth in numbers of approved high schools.[3]

Since its inception the University department of education has pursued persistently the objectives for which it was created. In doing so it has followed the example of other such departments elsewhere. A study made in 1915 showed that all of the departments of education in 40 state univer-

[1]Davis, J. T., *Rural Teacher Training in Texas; passim.*
[2]*Biennial Report*, 1888.
[3]Davis, J. T., *Op. Cit.*, p. 29.

sities and colleges were devoting their energies primarily to training high-school teachers and principals and superintendents.[4] To these original objectives, however, have been added at the University of Texas (a) the preparation of teachers for normal schools and colleges, and (b) the scientific study, and the training of scientific students, of educational problems of every sort. In the field of educational research the University makes no effort to narrow its interests or endeavors.

The aims of the teacher-training department at the College of Industrial Arts may be inferred from the following quotations:

The College of Industrial Arts was opened in 1903. The purpose and scope of the foundation of the college is set forth in the preliminary announcement. "Purpose and scope: A first class industrial institute and college for the education of white girls in this state in the arts and sciences, in which such girls may acquire a literary education, together with a knowledge of kindergarten instruction..." It continues further, "Teachers who desire to prepare for teaching in the public schools will be provided with special courses in the theory and practice of such work."[5]

Teachers who desire to prepare for teaching manual training, including sewing and cooking, in the public schools, will be welcome to the institution and will be provided with courses in theory and practice work, suitable for primary, grammar, and high schools.[6]

The Department of Philosophy and Education has a two-fold purpose in offering courses in the various groups of work in education. Fundamentally, the work is designed to give special training to those who expect to make teaching a profession... Many of the courses are highly desirable for those who are to follow other lines of activity... The course in Child Study, as well as other related courses offered in the Department, is designed primarily for training in home environment.[7]

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[4]Alexander, Carter; School Review Monographs; VI, p. 3.

[5]Rutledge; quoting from *Preliminary Announcement Bulletin*, February 20, 1903; p. 3.

[6]Catalogue, College of Industrial Arts; 1910-11, p. 69; 1913-14.

[7]Ibid., 1920, p. 117.

From these statements it appears that the purpose of the College of Industrial Arts, in the teacher-training field, are to train kindergarten teachers, and teachers of "manual training, including cooking and sewing," in both elementary and high schools. In addition, the general cultural values, and particularly the domestic values, of courses in Education are duly recognized.

Teacher-training courses at the Agricultural and Mechanical College have come in response to the provisions of the Smith-Hughes Act of 1917. "The State Board of Education in Texas has designated the Agricultural and Mechanical College as an agency for the training of teachers of agriculture and industrial subjects under the terms of this act. Immediately after the passage of the Smith-Hughes law in 1917, a department of education was established at the Agricultural and Mechanical College of Texas for the purpose of training high school teachers of agriculture and industrial education."[8] The college also recognizes the need for training supervisors and administrators of such work.

The foregoing statements review the avowed purposes of these three institutions, so far as teacher-training goes, as set forth in their literature. A survey of the courses offered by each institution shows that in general they conform rather closely to the objectives set forth above. At the University the great majority of distinctly professional courses are directed toward the training of high school teachers and supervisory and administrative officers. At the College of Industrial Arts the schedule of courses seems to have been formulated with the objectives already set forth clearly in mind. The same is true of the offering at the Agricultural and Mechanical College. In all three institutions there are properly provided certain general basic courses in Educational Psychology and Sociology, History of Education, and Educational Philosophy.

Very slight indication is gained from inspection of the lists of courses offered in the education departments of

[8]Davis, J. T., *Op. Cit.*, p. 48.

these institutions, of a departure from these avowed aims. An example at the University is found in the Freshman course in Education. The presence of this course is explained by the requirements of the existing certification law.

Outside the education department, there are also organized at the University courses for the preparation of domestic science teachers under the Smith-Hughes act. The College of Industrial Arts lists among its professional courses "special methods" courses in English, History, Physical and Biological Sciences, and Reading. The bearing of these courses upon the aims set forth in the announcements is not entirely clear. The course in School Administration at the Agricultural and Mechanical College also suggests a question. But with these exceptions, which are almost negligible in proportion to the total offering of each institution, the schedules of courses bear out the explicit statements of aim in each case.

During the period from September 1, 1920, to August 31, 1921, a total of 286 teachers applied for certificates upon the basis of work done at the University. Teachers' diplomas, based upon the completion of requirements for the B.A. degree and including requirements in Education, were awarded to 30 students. Ten students completed the work for graduate degrees with their major or one minor in Education. During the period from February 1, 1920, to January 31, 1921, the Teachers' Appointment Bureau at the University placed 208 teachers in high-school positions, 35 in elementary school positions, and 57 in positions as principals or superintendents. In 1920-21, the Agricultural and Mechanical College placed 33 teachers of agriculture in high schools and 21 principals and administrators.[9]

In connection with these facts of placement it is interesting to note that 465 new teachers, without high-school experience of any sort, were absorbed by the high schools of Texas in the fall of 1921.[10]

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[9]Similar data requested from the College of Industrial Arts were not received in time to incorporate them in this report.

[10]See "The Status of Texas High-School Teachers," elsewhere in this bulletin.

The writer of this paper believes that these institutions should continue to develop their work for the training of teachers along the lines that have been indicated as their accepted objectives. For the present, he believes that the emphasis at the University should upon the training of high-school teachers and supervisory and administrative officers, at the Agricultural and Mechanical College upon the training of teachers of agriculture and industrial subjects, and at the College of Iudustrial Arts upon the training of teachers of domestic science and related subjects. But he would not mercilessly restrict any of these institutions to the fields herein indicated; neither would he shut out from these fields other competent institutions. It will probably be agreed that no teacher-training agency will wisely embark upon a line of service in which it cannot hope to do creditable and efficient work. But the important question before all of these institutions in Texas today is not the apportionment of the field among them according to the types of teachers to be trained, and the erection of a "verboten" sign upon each one's reservation. The important problems before these agencies at present are (1) to stimulate attendance upon these institutions and certification through them, (2) to make as efficient as possible the work that each one attempts to do, (3) to see to it that the needs of all teachers of all classes are provided for, and (4) to make financially possible the maintenance of a complete corps of adequately trained teachers by the state. As an immediate step in this direction, would it not be wise for all these institutions to allay their differences, if such exist, and co-operate to devise a plan for the furthering of these four objects, and continue to co-operate until they are accomplished?

Every teacher-training institution will find guidance in the search for its proper field of service by taking note of the demands coming from its own student-body and from the schools which draw upon it for teachers. In any institution of college rank when sufficient *bona fide* demand for any particular sort of training exists, Texas is justified in making liberal appropriation for its satisfaction. This

policy may result in a certain amount of apparent duplication; but the writer believes that such duplication is not only harmless but essential. With respect to the nature of the demands made upon it and of its ability to meet them, each institution should be its own best judge. If each one will conscientiously apply itself to discovering and satisfying the demands which are actually being made upon it, none need fear the encroachments of others upon its peculiar field. Also all will find sufficient work to do.

The writer is not informed as to the demands for teachers and types of training actually confronting the Agricultural and Mechanical College and the College of Industrial Arts. It seems fair to assume that they correspond to the objectives which these schools have accepted and to the courses which they have adopted. But the writer is in a better position to judge of the demands confronting the University.

To meet the actual requirements of its students and of the schools which it supplies, the University should eventually be equipped to cover the whole gamut of teacher-training. It should be able to direct each of its students into that field of work for which he is best suited by preference and ability. It should have available, for the training of effective supervisors, laboratories illustrative of the various fields of teaching. These diversified laboratories are also essential for the use of research students, and of students preparing to teach professional subjects in other institutions. A frequent experience of an instructor at the University of Texas today is that of being forced to divert an earnest student from his chosen field of practice or investigation because facilities are lacking for carrying the work forward. In a university of the first class such experiences should be uncommon. In order that it may guide its students properly into appropriate fields, and in order that it may effectively serve prospective administrators and supervisors and mature research students, the writer urges the necessity of freedom for the university to work out its own lines of service in teacher-training as it perceives the need; but fairness and efficiency both require that there be granted to all its sister institutions the same large liberty.

THE FUNCTIONS OF THE NORMAL COLLEGES IN THE SOLUTION OF THE TEACHER-PROBLEM

ROBERT L. MARQUIS
President of Sul Ross Normal College

There are six normal colleges now in operation, one scheduled to open in 1923, and another which will probably be provided for in 1925. In order of their establishment, they are:

The Sam Houston Normal Institute, Huntsville, opened 1879.

The North Texas State Normal College, Denton, opened 1901.

The Southwest Texas State Normal College, San Marcos, opened 1903.

The West Texas State Normal College, Canyon, Texas, opened 1910.

The Sul Ross State Normal College, Alpine, Texas, opened 1920.

The Stephen F. Austin State Normal College, Nacogdoches, scheduled to open 1923.

The legislature has provided for a state normal college for South Texas. This school has been located at Kingsville by the Board of Regents, and will probably open in 1925.

CONTROL

For thirty-two years, from 1879 to 1911, these schools were governed by the State Board of Education. The State Board of Education is an ex-officio board and consists of the governor, comptroller, and the secretary of State. In 1911 the legislature created "The State Board of Regents for the Normal Colleges," and gave this board control of the schools.

EVOLUTION OF THE CURRICULUM

From the beginning courses of study, admission requirements and graduation conditions have been fairly uniform. Until 1913 the course of study extended over three years; no positive admission requirements were imposed on applicants who requested permission to do the work of the first year. High-school graduates were admitted to the senior year. The subject matter offered was largely determined by the certificate law in force. Students in the first year studied and reviewed all of the subjects required for a second grade certificate; in the second year, the subjects required for a first grade certificate; and in the third, or senior year, subjects required for a permanent certificate. Graduates were admitted to the freshman class of the University with credit for one unspecified course.

In 1903 the Board of Regents authorized the four schools then in operation to make several far-reaching changes in their organization. First; they should offer two years of sub-college work and two years of college work. Second; admission requirements were raised. Third; Training schools were organized and all graduates were required to do actual teaching before they could be graduated. Another step forward was taken in 1917, when the college added two more years to the curriculum and offered the bachelor's degree.

The Sul Ross State Normal College offers only two years of college work.

PRESENT ORGANIZATION

At present the State Normal Colleges require fifteen units for admission and offer four years of college work leading to a bachelor's degree. Diplomas in Elementary Education are awarded for the completion of two years of college work. Two years of sub-college work, called normal school work, are given, and, restricted, short-lived certificates are issued on them.

Training Schools are maintained, and are made up of a kindergarten and nine grades. There is an unbroken unit, as follows:

1. College, four years.
2. Normal School, two years.
3. Training School, nine years.
4. Kindergarten, one year.

Courses of study are offered, covering every subject taught in the state public schools; and every student may teach his major subject under supervision in the training school.

The following curricula are offered:

1. Kindergarten.
2. Primary and Elementary.
3. Intermediate.
4. High School.
5. Special Subjects.

STATUS INTERPRETED

When the eight State Normal Colleges now provided for are in operation each section of the state will have a teacher-training institution near at hand. This policy is in line with that practiced in the other states. The schools must be brought to the homes of the people rather than bring the people away from their homes to the schools.

The ex-officio board which controlled normal schools was objectionable from two standpoints. First, it was ex-officio, and not a school board. Second, it was a one man board; the governor appoints the secretary of state. We shall make the plain admission that during the years this ex-officio board administered the normals, these schools made no progress. Normal school history under the Board of Regents is another story. From the beginning the personnel of the Board has been citizens of the first class, and, there have been many reappointments, and as a result considerable stability of policy. Very soon after the Board was organized it evolved a program for developing the nor-

mals into teacher training institutions. Members of the Board visit the schools often, keeping in close touch with the schools and their needs.

Until 1913 no attempt was made to train high-school teachers. Notwithstanding this fact, many graduates were used in our best high schools over the state, and some of them have become successful principals and superintendents. As high-school standards were constantly raised, however, students began to ask for higher preparation to meet them. In response to their request the Normal Colleges determined to move forward with the procession.

The present organization, noted above, lays a foundation for training men and women for teaching in every part of our public school system. To have maintained two-year colleges would have made female colleges of our normal schools, since elementary education is in the hands of women, and the state teacher training schools would have only partially undertaken the task for which they were created. No apology is offered for undertaking their whole duty. No other work has been undertaken and no strange gods are being served. The Texas Normal Colleges have stayed in their allotted field, and their aim is to occupy it fully.

A REASONABLY IDEAL STATUS

There should be:

a. A teacher-training institution in every section of the state.

b. Teacher-training schools, being technical schools, should have a separate board of control.

c. These schools should train teachers for every grade and every subject taught in the state's public school system.

d. The training school, or laboratory, should offer a practical field for every subject taught in our public school system.

e. Research work should be carried on in Education. This is the field for research work in our Normal Colleges.

f. Some extension work in Education should be provided for.

WHAT TEXAS SHOULD DO TO REALIZE THIS STATUS

First of all place the state teacher training colleges on a par in every way with those devoted to the preparation of lawyers, doctors, farmers, home-makers, and engineers. Provide buildings, libraries, and laboratories for the training of men and women for teaching, which is a civil service, equivalent to those provided for the professions mentioned above, which are, more or less personal in their blessings and benefits. Raise the standards of certification high. Make the cost of preparation equal to that in the other professions, and pay salaries which will enable men and women to enjoy standards of living commensurate with their stations. Finally, let it be said that the State Normal Colleges are committed to a program for teacher training that is open at the top, devoted to the welfare of the children to be taught and to the making of the business of teaching a profession, and second to none.

TEACHER TRAINING IN JUNIOR COLLEGES IN TEXAS

J. O. LEATH, Dean of Kidd-Key College

Bulletin 132, July 30, 1921, published by the State Department of Education, Texas, lists the following institutions in Texas as independent junior colleges of the first class: Alexander College, Jacksonville; Burleson College, Greenville; Carr-Burdette College, Sherman; College of Marshall, Marshall; Clarendon College, Clarendon; Decatur Baptist Junior College, Decatur; Kidd-Key College and Conservatory, Sherman; Meridian Junior College, Meridian; Midland College, Midland; Rusk Junior College, Rusk; Texas Military College, Terrell; Thorp Spring Christian College, Thorp Spring; Wayland Baptist College, Plainview; Wesley College Greenville; Westminster College, Tehuacana; Westmoorland College, San Antonio. The same bulletin cites the College of the City of El Paso as a municipal junior college of the first class. In addition to these there are the John Tarleton Agricultural College, Stephenville, and Grubbs Vocational College, Arlington, which are state junior colleges and branches of the Agricultural and Mechanical College of Texas. Each of the above mentioned institutions has the privilege under the laws of Texas to conduct teacher training classes for the elementary and the high schools of Texas.

For the preparation of this article, the writer sought first-hand information from each of the above mentioned institutions and replies were received from the three public and 13 out of 16 independent junior colleges. All of these institutions except one report teacher training as a major feature of the program. In answer to the question, how many students of college grade are enrolled in education classes, 11 of the 16 independent junior colleges report a total of 702 for 1921-'22 and 661 for 1920-'21. Eight of the same 11 report 329 for 1919-'20. Five of the 8 report 317

for 1918-'19 and 283 for 1917-'18, the year the junior college law went into effect. The College of the City of El Paso has had only two years of history. The first year it enrolled 7 students in education classes; the present session 43. The past five years the two State junior colleges enrolled for each year respectively the following numbers in education classes, beginning with 1917-'18: 47, 79, 81, 101, 162.

In answer to the question, what proportion for each of the five years were the students in education of the total number of college students, 12 independent junior colleges gave the average of 64 per cent. for 1921-'22 and 57 per cent. for 1920-'21. Ten of the same 12 report an average of 54 for 1919-'20. Eight of the same 10 report an average of 49 per cent. for 1918-'19, and 50 per cent. for 1917-'18. The College of the City of El Paso reports 41 per cent. for 1920-'21 and 42 per cent. for 1921-'22. The two states junior colleges report averages as follows: 1917-'18, 29 per cent.; 1918-'19, 39 per cent.; 1919-'20, 38 per cent.; 1920-'21 45 per cent.; 1921-'22, 35 per cent. For the five years for the independent junior colleges reporting, the average per cent. of students in education of the total number of college students is 55; for the two state junior colleges, 37; and for the one municipal junior college for the two years, 41½.

These statistics are sufficiently accurate to demonstrate that junior colleges in Texas are giving much attention to teacher training and that this degree of attention is unmistakably on the increase. Furthermore, more attention is being given thereto by the independent than by the public junior colleges. It is safe to say that the independent junior colleges find as one of the principal reasons for existence the opportunity to do teacher training for the public schools of Texas. The public junior colleges are equipped to specialize along other vocational lines than teacher training; hence a smaller per cent. of their students take teacher training courses. The vocational opportunities in independent junior colleges are more limited to education, music

and the fine arts, and home economics. The report from the nation as a whole indicates that only 9 per cent. of the subjects offered in private are vocational as against 53 per cent. in public junior colleges.

The above conclusions are in keeping with a study of the junior college in the United States made by F. M. McDowell and published by the Bureau of Education, Washington, as Bulletin for 1919, No. 35. In this report, the author says: "In some sections of the country, the private junior colleges have been encouraged as a means of providing for additional opportunities for teacher training. This is especially true of Texas... A large number of junior colleges have been established under the junior college law, evidently expecting to make teacher training a prominent feature." The same authority reports that 34 per cent. of the private junior colleges in America responding to his questionnaire state the desire to provide for additional opportunities for teacher training as one of the reasons for their organization. On the other hand, only 9½ per cent of the public junior colleges responding mentioned teacher training as one of the principal reasons for their organization. In this connection, it may be well to say that this report, 1919, indicates 93 private junior colleges and 39 public junior colleges in America; Texas and Missouri leading in the former with 16 and 14 respectively, and California leading in the latter with 21. While this report indicates that teacher training in public junior colleges is not being magnified, yet a majority of the public junior colleges are in California, where teacher training is otherwise well provided for. "On the other hand," he says, "a number of the private colleges are in Texas, in which state they are established especially for the purpose of providing better opportunities for the training of teachers."

So we are not surprised to find that the junior colleges in Texas, both private and public, are magnifying the opportunity to do teacher training to a greater extent than in the nation as a whole. It is safe to say that, had Texas more first-class junior colleges, public as well as private, the cry-

ing need for more and better trained public school teachers would in itself be almost a sufficient reason for the existence of those institutions. In thinking of the above statements, consider the situation in Texas to-day with reference to trained teachers. I quote from Bulletin 133, August,1921, published by the Department of Education, Texas: Fifty per cent. of the teachers in the common schools have certificates below the first grade; 19 per cent. in the independent districts have certificates below the first grade; 48 per cent. of the teachers in the common school districts are graduates of no schools; 79 per cent. of them lack college training; 45 per cent. of the teachers in independent districts lack college training, and only 30 per cent. of them are graduates of normal schools. In 1920 only 33 per cent. of the teachers of the state were graduates of high schools; 21 per cent. of normal schools; 13 per cent. of colleges or universities; and 33 per cent. were not graduates of any school. In 1920, when 11,232 teachers in Texas, 37 per cent. of the total, had certificates below the first grade; and when 12,656, 79 per cent. of the total number in common school districts, had no college training whatever; that same year there were in junior colleges in Texas only 661 students taking courses in teacher training. And that same year only about 1,500 people received certificates through all the colleges and universities in Texas.

The question may be raised as to whether those who are pursuing teacher training courses in junior colleges are actually entering the teaching profession. Reports from ten out of sixteen independent junior colleges in Texas indicate that during the past four years on the average about 38 per cent. of those who took courses in education actually received certificates and taught. This 38 per cent. is also about 21 per cent. of the total number of college students during the time. From the two state junior colleges, the report comes that for the four years an average of 60 per cent. who took courses in education received certificates and began teaching. This 60 per cent. represents about 22 per cent. of the total number of college students during the time.

None of the seven who took work in education at the College of the City of El Paso has begun teaching except those who were at the time engaged in teaching in the public schools of the city.

So the statistics indicate that in the private junior colleges a larger percentage of students pursue courses in education; that in public junior colleges a larger percentage of those who take work in education actually enter the profession of teaching; and finally that approximately the same proportion of college students at the two classes of institutions, private and public, actually immediately find their way into the work of teaching. As we have noticed, the first fact is to be explained by reason of the fact that the private junior college is more limited to teacher training as a vocational interest than is the public institution. The second fact is probably due to the greater emphasis in the private school on continuing studies at a university. Our two state junior colleges emphasize vocational activities, especially along agricultural lines. However, the report from the nation as a whole, to which reference has already been made, shows that 73 per cent. of the graduates of public junior colleges continue their work in higher institutions, whereas only 41 per cent. of the graduates of private junior colleges continue their studies. We should remember, however, that most of the public junior colleges, from which that report was made, were not state agricultural colleges, such as ours, but municipal junior colleges, a majority of which are in California, where higher education is strongly emphasized. Then, it seems, we may normally expect only about 20 per cent. of the total enrollment of college students at the junior colleges of Texas to enter on leaving those institutions the work of teaching. So taking the total enrollment of the nineteen junior colleges for the session 1921-'22 we may expect not more than about 300 available teachers for next year.

On investigation I find that seven out of the fourteen of the junior colleges reporting are giving courses in rural education, and six of the fourteen report that their chief

concern as regards teacher training is to qualify teachers for rural schools. Twelve out of fourteen are giving courses especially adapted to elementary teaching, and seven of the twelve state that their chief concern is to prepare for elementary teaching, without specifying whether rural or city. The remaining two are giving only general courses in education. Ten are giving special courses in high-school teaching, and only four are giving first consideration to the preparation of high-school teachers or even placing preparation for high-school teaching on a parity with preparation for elementary or rural teaching. High-school teaching is generally referred to with the explanation that their students teach in small towns. One school reports a course in special methods of teaching the manual arts and a course in school administration.

From the above statement it is evident that the junior colleges in Texas are placing emphasis first of all on the preparation of teachers for the elementary grades and with almost equal emphasis for the rural schools. In other words, they are contributing their efforts to the amelioration of the weakest spot in our entire public school system. In answer to the inquiry as to the number of teachers trained during the session 1920-'21 and placed in the various types or levels of the public school system, 12 of the 19 junior colleges gave answers which total as follows: Rural or village common schools, 116; elementary schools, 63; city or independent schools, 59; high schools, 26; principals or superintendents, 13; kindergartens, 4; agricultural teaching, 2; manual training teaching, 2; science teaching, 1. Almost universal failure to respond to the inquiry as to what agencies and activities are made use of in placing teachers would lead me to conclude that the junior colleges have very little organized system in that matter, but depend for the most part on the individual initiative of the prospective teacher, backed up by personal recommendations from the institutions concerned. Perhaps this is due to the fact that junior colleges have been functioning as teacher training centers only during the past four years besides the present session,

during which time the scarcity of teachers rendered the securing of positions by trained teachers relatively easy.

Reports from 13 of the junior colleges for the session 1920-'21 would indicate a decided preference for the old certificate law, that is, 214 were given the two years first grade certificate under the old law as opposed to 95 who received certificates under the new law. Of the 95, 18 received the four years elementary; 16 the six years elementary; 49 the two years high school; 12 the four years high-school certificate. The universality of the old law seemingly made its appeal, despite the fact that very few on leaving junior college become teachers in first class high schools. Furthermore, of the 95 who chose the new law, 49 took the two years high-school rather than the four years elementary certificate, and only 18 chose the four years elementary certificate. This probably indicates a desire to teach in small towns, where there are third class or unclassified high schools. More experience with the new law may make it more attractive.

Having taken a general view of the actual status of teacher training and placement in Texas as related to the junior colleges, let us now with more brevity point out a reasonably ideal situation. In the first place I will say that I believe that Texas needs her present junior colleges, independent and public, to assist in the work of teacher training. In the light of the facts already presented, we shall all agree that Texas needs a more adequate supply of properly trained teachers. The question remains, Should Texas attempt to do this work without the aid of the junior colleges? It is economical to the state to rely on the 16 independent junior colleges for a supply of properly trained teachers. Unless, under proper state supervision, they should be permitted to continue their work or teacher training.

But a reasonably ideal situation demands that these institutions be strengthened. Many of them are in need of better buildings and equipment and stronger and more permanent faculties. Practically all of them need a perma-

nent endowment fund and an opportunity for practice teaching under supervision. One president of a junior college thinks that his denomination should establish one more such institution in another section of the state; but replies from 13 others are to the effect that their denominations should establish no more but rather strengthen those junior collges now in existence. Personally I believe that that opinion predominates throughout the various denominations of Texas. In reply to the question as to what the junior colleges need to enable them to function better as teacher training centers, 8 say more and better buildings and equipment, more experienced teachers—in other words, more financial support. Two insist that there is need of more encouragement and co-operation from the state, not specifying just what is meant. Personally I think the state is giving the independent junior colleges a proper chance, and let us hope that they may be able to endure the strenuous financial depression till the various denominational educational movements can result in strengthening them as desired and needed.

I believe that in various sections of the state, removed from the cities and other state colleges and universities and in close touch with agricultural interests, the state should establish other agricultural junior colleges similar to the two it now has and should see that they contain strong departments of teacher training for the rural schools. Most of their patronage will necessarily come from the farms, and they will be in splendid position to train not only farmers but also teachers for farmers' children. I find this idea voluntarily supported by the report from one of our state junior colleges.

In answer to the question—Do you think the leading cities of Texas, about two dozen of them, in the interest of teacher training, should be encouraged to establish municipal junior colleges—ten of the reports answer yes and five no; the five noes being from independent institutions. Personally I believe that, in the interest of teacher training and of general educational economy, that would be a splendid policy.

President Roberts, of the Junior College of the City of El Paso, reports: "During the first year (1920-'21) the enrollment numbered 17 students, 7 of whom followed courses in education. This year we have 101 students, 43 of whom are taking courses in education... A number of grade teachers in El Paso are doing work with the junior college... There are many poor people who make excellent teachers, yet are too poor to go away somewhere. I believe the junior college will raise the standard of teachers in every local community where it exists." F. M. McDowell, in Bulletin for 1919, No. 35, Bureau of Education, Washington, collates the following significant assigned reasons why public junior colleges were established: 1. The desire of parents to keep children at home. 2. To provide a completion school for those who can not go further. 3. Desire of students to secure college work near home. 4. 4. To meet specific local needs. 5. Geographical remoteness from standard college or university. 6. To meet the entrance requirements (generally two years of college work) of professional schools. 7. To provide vocational training more advanced than high school work. 8. To provide additional opportunities for teacher training, etc. In addition, it may be said that it would be more economical for a city to establish a junior college than to send away to college hundreds of Freshmen and Sophomores. Furthermore, as soon as the state, in the interest of teacher training, can give up the Freshman and Sophomore years at its university and its A. & M. College, it would be a sound economic and pedagogical policy to do so and use that money and power to help build state and municipal junior colleges. In 1919 the state of California was appropriating $15 per student to those enrolled in 21 municipal junior colleges. Furthermore, there are social and moral reasons in favor of training in a junior college as against a large university for the first two years of college work. It is generally recognized that those two years are secondary rather then higher education. Also there seems an unnecessarily large waste of human values among Freshmen at all large universities,

something like 25 per cent. failing and dropping out of school. The break between the high school and the university, right in the midst of adolescence, is generally being recognized by students of education as too great. The junior college attempts to solve this difficulty just as the junior high school attempts to remedy the difficulty arising by reason of the break between the elementary and the high school. Theoretically, it seems that teachers trained in a junior college, being upperclassmen and therefore having splendid opportunity for developing personality and leadership, should be relatively well prepared for their work.

I think that a reasonably ideal situation demands that in the near future no one be certificated to teach in the elementary schools of Texas without at least two years of college or normal school work and teacher training beyond the high school; that no one be certificated to teach in the first class high schools of Texas without at least a bachelor's degree and four years' teacher training in a first class college, university, or normal school; and that no one be permitted to teach in a first class junior college without at least one year of graduate study beyond the bachelor's degree. An adequate system of teacher training would soon give us the supply of trained teachers as needed, provided we also create proper conditions under which teachers thus trained can afford to work. To that end, we must adopt the county unit under expert supervision; consolidate the rural schools; build rural high schools and take the children to those consolidated schools; supply adequate buildings, grounds, and equipment, and a nine months' term for all the schools; raise and strengthen the compulsory attendance law; and pay at least the average salaries that prevail in the United States to the various grades of teachers. Should we do these things, then teaching in Texas would begin to be a profession and our much vaunted democracy would cease to belie itself in denying equal educational opportunities to all the children of Texas.

We can not reach the ideal situation all at once, but some things we need to do immediately. The friends of educa-

tion in Texas should encourage and co-operate with the various denominations in properly strengthening the independent junior colleges now in existence and discourage for the present the estabishment of any more. As soon as the financial crisis has passed, we should appeal the legislature to establish a few more junior agricultural and mechanical colleges with strong departments of teacher training for the rural schools. Some of these may very appropriately be located in the western half of the state. We should encourage about two dozen of the leading cities of Texas to take immediate steps to build municipal junior colleges with strong departments of teacher training and should assist those institutions to find their place as a part of our public school system. If the present constitutional local tax limitation is a hindrance to this effort, we should organize a movement to remove the limitation. Along the lines suggested above, we should ask for an amendment to the certificate laws to become effective within about five years from date. We should ask for constitutional amendments making provision for the maintenance of the higher institutions of Texas by a special tax rather than relying too much on special appropriations, and for raising the advalorem school tax from 35 cents to about 50 cents, a portion of this to inure to the special benefit of the rural schools. We should ask the next session of the legislature to increase the general appropriation for the publuic schools and the special appropriation for the rural schools. By propaganda and appeals for appropriate legislation, we should strive immediately for the county unit under expert supervision, the consolidation of rural schools and the building of rural high schools, the strengthening of the compulsory attendance law, and the appropriation of scholastic money on the basis of actual attendance rather than on that of scholastic population. Probably we could best further the educational interests of Texas by using our influence for constiutional convention, where all of these matters could receive united consideration. The immediate task of the friends of education in Texas is to help all Texas to see that the wisest and

biggest and most economical thing to do is to make provision for adequate and equal educational opportunities for all the children of Texas.